$%^Dialog;HighlightOn=%%%;HighlightOff=%%%;

Dialing TYMNET (19200 baud) at 9,3857587

+++ATH
OK
ATDT9,3857587
CONNECT 14400/ARQ/V32/LAPM

Connecting through TYMNET

please type your terminal identifier
-6264:01-005-
please log in: dialog

DIALOG: call connected

Logging in to Dialog

DIALOG INFORMATION SERVICES
PLEASE LOGON:
****
ENTER PASSWORD:
****
Welcome to DIALOG

Dialog level 98.08.31D

Last logoff: 21sep98 14:12:05
Logon file001 23sep98 12:31:41
ANNOUNCEMENT **** ANNOUNCEMENT **** ANNOUNCEMENT
NEW
***CorpTech (File 559)
***Gannett News Service (File 604)
***UMI Newsstand(TM) (File 781)
***Baton Rouge Advocate (File 382)
                    ***
RELOADED
***LA Times (File 630)
***Research Centers and Services (File 115)
                    ***
REMOVED
***Financial Times Fulltext (File 622)
***IAC Industry Express (File 12) - merged into IAC PROMT (file 16)
***UPI News archival (File 260)
***Federal Register (File 669 - replaced by File 180)

***

NEW UK HELP DESK PHONE NUMBER
***Please note that the UK Help Desk telephone number has
    been changed to (0800) 69 00 00.
    >>> Enter BEGIN HOMEBASE for Dialog Announcements <<<
    >>>   of new databases, price changes, etc.   <<<
    >>>   Announcements last updated 1 September 98 <<<

File   1:ERIC 1966-1998/Jul
        (c) format only 1998 The Dialog Corporation

    Set Items Description
    --- ----- -----------
? b 410
      23sep98 12:31:45 User219455 Session D517.1
          $0.12   0.038 DialUnits File1
      $0.12 Estimated cost File1
      $0.01 TYMNET
      $0.13 Estimated cost this search
      $0.13 Estimated total session cost 0.038 DialUnits

File 410:Chronolog(R) 1981-1998/Sep/Oct
        (c) 1998 The Dialog Corporation plc

    Set Items Description
    --- ----- -----------
? set hi %%%;set hi %%%
HILIGHT set on as '%%%'%%%
%%%HILIGHT set on as '%%%'
? begin 411
      23sep98 12:32:05 User219455 Session D517.2
          $0.00   0.035 DialUnits File410
      $0.00 Estimated cost File410
      $0.06 TYMNET
      $0.06 Estimated cost this search
      $0.19 Estimated total session cost 0.073 DialUnits
File 411:DIALINDEX(R)

DIALINDEX(R)
  (c) 1998 The Dialog Corporation plc

*** DIALINDEX search results display in an abbreviated ***
*** format unless you enter the SET DETAIL ON command. ***
? sf compsci,patents,35
>>>   352 is unauthorized
>>>   353 is unauthorized
>>>2 of the specified files are not available
    You have 29 files in your file list.
    (To see banners, use SHOW FILES command)
? s (maintenance or maintainence) and repair and (fill?(3w)out) and (form? or table?)

Your SELECT statement is:

s (maintenance or maintainence) and repair and (fill?(3w)out) and (form? or table?)

```
    Items  File
    -----  ----
       1    6: NTIS_64-1998/Oct W3
       1    8: Ei Compendex(R)_1970-1998/Oct W2
       1   94: JICST-EPlus_1985-1998/Jul W1
       1   99: Wilson Appl. Sci & Tech Abs_1983-1998/Aug
       6  211: IAC Newsearch(TM)_1997-1998/Sep 22
      45  275: IAC(SM) Computer Database(TM)_1983-1998/Sep 22
       7  647: CMP  Computer Fulltext_1988-1998/Aug W5
       2  696: DIALOG Telecom. Newsletters_1995-1998/Sep 23
       1  674: Computer News Fulltext_1989-1998/Sep W3
```
>>>File 348 processing for FORM? stopped at FORMATIERUNGSSCHALTUNG
```
      15  348: European Patents_1978-1998/Sep W38
```
Processing
Processing
Processing
>>>File 654 processing for FORM? stopped at FORMOXYBENZOIC
```
      60  654: US Pat.Full._1990-1998/Sep 15
```
Processing
<------User Break------>
Processing
>>>File 653 processing for FORM? stopped at FORMULALN
```
      34  653: US Pat.Fulltext_1980-1989
```
<------User Break------>
Processing
>>>File 652 processing for FORM? stopped at FORMYLESTR
```
      21  652: US Patents Fulltext_1971-1979
```

13 files have one or more items; file list includes 29 files.
One or more terms were invalid in 7 files.

? s (maintenance or maintainance) and repair and (fill?(3w)out) and (form or forms or table or tables)

Your SELECT statement is:
    s (maintenance or maintainance) and repair and (fill?(3w)out) and (form or forms or table or tables)

```
    Items  File
    -----  ----
       1    6: NTIS_64-1998/Oct W3
       1    8: Ei Compendex(R)_1970-1998/Oct W2
       1   94: JICST-EPlus_1985-1998/Jul W1
       1   99: Wilson Appl. Sci & Tech Abs_1983-1998/Aug
       6  211: IAC Newsearch(TM)_1997-1998/Sep 22
      43  275: IAC(SM) Computer Database(TM)_1983-1998/Sep 22
       5  647: CMP  Computer Fulltext_1988-1998/Aug W5
       2  696: DIALOG Telecom. Newsletters_1995-1998/Sep 23
       1  674: Computer News Fulltext_1989-1998/Sep W3
      15  348: European Patents_1978-1998/Sep W38
```

Processing
    57   654: US Pat.Full._1990-1998/Sep 15
Processing
    31   653: US Pat.Fulltext_1980-1989
    20   652: US Patents Fulltext_1971-1979

13 files have one or more items; file list includes 29 files.

? s (maintenance or maintainance) and repair and (fill?(3w)out)(20n) (form or forms or table or tables)

Your SELECT statement is:
  s (maintenance or maintainance) and repair and (fill?(3w)out)(20n) (form or forms or table or tables)

    Items File
    ----- ----
    1   94: JICST-EPlus_1985-1998/Jul W1
    4 211: IAC Newsearch(TM)_1997-1998/Sep 22
   21 275: IAC(SM) Computer Database(TM)_1983-1998/Sep 22
    5 647: CMP Computer Fulltext_1988-1998/Aug W5
    1 696: DIALOG Telecom. Newsletters_1995-1998/Sep 23
    1 348: European Patents_1978-1998/Sep W38
Processing
Processing
   13 654: US Pat.Full._1990-1998/Sep 15
Processing
    3 653: US Pat.Fulltext_1980-1989
Processing
    1 652: US Patents Fulltext_1971-1979

9 files have one or more items; file list includes 29 files.

? begin 94,211
    23sep98 12:46:31 User219455 Session D517.3
      $11.46   9.169 DialUnits File411
  $11.46 Estimated cost File411
  $3.00 TYMNET
  $14.46 Estimated cost this search
  $14.65 Estimated total session cost 9.242 DialUnits

SYSTEM:OS - DIALOG OneSearch
 File 94:JICST-EPlus 1985-1998/Jul W1
    (c)1998 Japan Science and Tech Corp(JST)
 File 211:IAC Newsearch(TM) 1997-1998/Sep 22
    (c) 1998 Info. Access Co.

  Set Items Description
  --- ----- -----------
? s (maintenance or maintainance) and repair and (fill?(3w)out)(20n) (form or forms or table or tables)
    48942 MAINTENANCE
    126 MAINTAINANCE
    23027 REPAIR

```
     48285  FILL?
    195951  OUT
     85458  FORM
     22675  FORMS
     92759  TABLE
      5436  TABLES
       337  FILL?(3W)OUT(20N)(((FORM OR FORMS) OR TABLE) OR TABLES)
 S1     5  (MAINTENANCE OR MAINTAINANCE) AND REPAIR AND
           (FILL?(3W)OUT)(20N) (FORM OR FORMS OR TABLE OR TABLES)
? t 1/2,ab,kwic/1-5
```

1/2,AB,KWIC/1   (Item 1 from file: 94)
DIALOG(R)File 94:JICST-EPlus

02590892 JICST ACCESSION NUMBER: 95A0180069 FILE SEGMENT: JICST-E
Woodworking Education and %%%Maintenance%%% and Repairment of Houses.
NAKAZATO MASAYUKI (1)

(1) Tokyo Gakugei Univ.

ABSTRACT: It is expected to teach students on characteristics of wood and
    manufacturing process of wood in woodworking in secondary education.
    The study on woodworking in school education is assumed to be used and
    applied for daily life in their future. To improve current contents of
    woodworking, this survery study was conducted and put focus on
    %%%maintenance%%% and repairement of houses. For the purpose, and
    open-ended questionnaire was developed and college students were asked
    to %%%fill%%% %%%out%%% the %%%form%%%. The results of the study showed
    that there are some common defects of %%%maintenance%%% and repairment
    of house, especially on the matters of 1. prevention of decay of wood
    2. knowledge of moisture contents and check & warp 3. relation ship
    between aging and regularly check and preventive measures of wooden
    material. This result of the survey shows that many cases
    %%%maintenance%%% and repairment of houses were made without
    considering of the characters of wood. This means that the conclusion
    of this study on woodworking education indicates that it is important
    to emphasis of appropriate use of wooden products in secondary
    education and teach students practical aspects of wooden products for
    daily life. (author abst.)
DESCRIPTORS: dwelling house; wooden structure; wood processing; education
    and training; rehabilitation management; durability; building
    management; %%%repair%%%
BROADER DESCRIPTORS: structure; working and processing; %%%maintenance%%%
    management; resistance(endure); management

CLASSIFICATION CODE(S): RB01020X

Woodworking Education and %%%Maintenance%%% and Repairment of Houses.
...ABSTRACT: To improve current contents of woodworking, this survery study
    was conducted and put focus on %%%maintenance%%% and repairement of
    houses. For the purpose, and open-ended questionnaire was developed and
    college students were asked to %%%fill%%% %%%out%%% the %%%form%%%. The
    results of the study showed that there are some common defects of
    %%%maintenance%%% and repairment of house, especially on the matters of
    1. prevention of decay of wood...

    ...and preventive measures of wooden material. This result of the survey
    shows that many cases %%%maintenance%%% and repairment of houses were
    made without considering of the characters of wood. This means...
    ...DESCRIPTORS: %%%repair%%%
    ...BROADER DESCRIPTORS: %%%maintenance%%% management

    1/2,AB,KWIC/2   (Item 1 from file: 211)
    DIALOG(R)File 211:IAC Newsearch(TM)
    (c) 1998 Info. Access Co. All rts. reserv.

    08955750   Supplier Number: 20898751   (Use format 7 or 9 for FULL TEXT)
    Meguiar's. (Meguiar's Inc.)(Direct Marketing Days in New York)
    Oser, Kris
    Direct, v10, n6, pS19(2)
    May 1, 1998
    ISSN: 1046-4174   LANGUAGE: English   RECORD TYPE: Fulltext
    WORD COUNT: 920   LINE COUNT: 00071

    COMPANY NAMES: Meguiar's Inc.--Marketing
    INDUSTRY CODES/NAMES: ADV   Advertising, Marketing and Public Relations;
    BUSN   Any type of business
    DESCRIPTORS: Database marketing--Usage; Polishes--Marketing
    PRODUCT NAMES: 2842000 (Polishes & Sanitation Goods); 9914910 (Direct
    Marketing)
    SIC CODES: 2842 Polishes and sanitation goods
    FILE SEGMENT: TI File 148
    SPECIAL FEATURES: photograph; illustration

    ...   of the business is focused on cars.
        The firm sells business-to-business to car %%%repair%%% shops and new
    car dealers, and to consumers, from the "exceptionally wealthy" automotive
    enthusiast and...

    ...response tool that makes that database hum is Meguiar's "Car Care
    Prescription," a detailed %%%maintenance%%% program provided free when
    customers fill out a questionnaire. These questionnaires come in from the

    ...

    ...a giant invitation at these events for people to stop by, ask for advice
    and %%%fill%%% %%%out%%% prescription %%%forms%%%. Some 20% of the drop-ins

are potential customers (they can number between 5,000...

1/2,AB,KWIC/3   (Item 2 from file: 211)
DIALOG(R)File 211:IAC Newsearch(TM)
(c) 1998 Info. Access Co. All rts. reserv.

08864124   Supplier Number: 20949001   (Use format 7 or 9 for FULL TEXT)
Finding the staffer with the right stuff.
Talcott, Janice Mack; Peterson, Kate B.
Jewelers Circular Keystone, v169, n7, p130(3)
July, 1998
ISSN: 0194-2905   LANGUAGE: English   RECORD TYPE: Fulltext; Abstract
WORD COUNT: 1973   LINE COUNT: 00160

ABSTRACT: Strategic planning prior to making a hiring decision is the key
to avoiding the prohibitive costs associated with employee turnover. While
experience and personality make for a seasoned and pleasant salesperson,
they do not lead to a productive sales staff. Instead, hiring based on
characteristics and skills produces better results. The first step before
hiring is to determine staffing needs through a careful assessment of
current staff and an understanding of the operations' needs. Flexibility,
creative problem solving and a forward-looking attitude are the
characteristics of a high-achieving candidate.

INDUSTRY CODES/NAMES: BUSN Any type of business; FASH Fashion,
Accessories and Textiles
DESCRIPTORS: Employee recruitment--Technique; Jewelry industry--
Recruiting
PRODUCT NAMES: 9918400 (Employee Recruitment); 3910000 (Jewelry &
Silverware)
SIC CODES: 3910 Jewelry, Silverware, and Plated Ware
FILE SEGMENT: TI File 148
SPECIAL FEATURES: photograph; illustration

... employment should any of the information prove to be false.
    Do not permit candidates to %%%fill%%% %%%out%%% the application at
home. If they complete the %%%form%%% in your store, you can observe their
focus, pace, and ability to manage pressure.
    The...or to research topics important to your business. For example,
ask them to compare competitors' %%%repair%%% prices or have them inventory
your supplies and prepare an order for the upcoming months...

...their achievements. High achievers often demand a great deal of
attention. Some call that "high %%%maintenance%%%," but it often comes with
the territory when someone really produces for you. When a...

1/2,AB,KWIC/4   (Item 3 from file: 211)
DIALOG(R)File 211:IAC Newsearch(TM)
(c) 1998 Info. Access Co. All rts. reserv.

08863154   Supplier Number: 20945858   (Use format 7 or 9 for FULL TEXT)
Final exam. (%%%maintenance%%%-management assessment)(includes related
   article on an assessment conducted at the University of Virginia,
   Charlottesville)
Coullahan, Richard
American School & University, v70, n9, p66H(3)
May, 1998
ISSN: 0003-0945   LANGUAGE: English   RECORD TYPE: Fulltext; Abstract
WORD COUNT: 1122   LINE COUNT: 00102

ABSTRACT: One of the ways by which school facility managers can improve
facility conditions and envision changes is through a %%%maintenance%%%
-management assessment. This involves a detailed examination of a school's
%%%maintenance%%% personnel, operations, procedures, work planning and
quality of service.

DESCRIPTORS: %%%Maintenance%%%--Management; School facilities--
   %%%Maintenance%%% and %%%repair%%%; Facility management--Technique
FILE SEGMENT: MI File 47
SPECIAL FEATURES: photograph; illustration
Final exam. (%%%maintenance%%%-management assessment)(includes related
   article on an assessment conducted at the University of Virginia,
   Charlottesville)

...ABSTRACT: by which school facility managers can improve facility
conditions and envision changes is through a %%%maintenance%%%-management
assessment. This involves a detailed examination of a school's
%%%maintenance%%% personnel, operations, procedures, work planning and
quality of service.

TEXT:
   Conducting a %%%maintenance%%%-management assessment can give details
on how to improve facility conditions and plan for future...
   Deferred %%%maintenance%%% on college campuses is a growing problem,
and likely to continue on an upward spiral unless adequate resources are
made for capital investment and %%%maintenance%%% management becomes a
priority.
   The first step toward improving %%%maintenance%%% management is an
independent, objective assessment of current conditions - a detailed look
at a campus' %%%maintenance%%% staffing, operations and %%%maintenance%%%
procedures, work planning, work scheduling and service quality. In an
assessment, a detailed report of...

...costs is produced.
   ASKING APPROPRIATE QUESTIONS
   An institution usually becomes aware of a problem in %%%maintenance%%%
when administrators see evidence of a growing backlog of %%%maintenance%%%
work, major outages, and complaints by faculty, staff and students.
   A %%%maintenance%%%-management assessment will focus on the structure,
processes and procedures of the %%%maintenance%%% organization. Key
operational considerations are examined, including work planning, work
scheduling, materials-management requirements, work...

...to order and track supplies; and people to keep track of what preventive and predictive %%%maintenance%%% needs to be done. In addition, work-load composition, volume and materials requirements are examined.

The %%%maintenance%%%-management assessment seeks to answer a number of important questions:

* Does the %%%maintenance%%% organization's structure support the delivery of service?

* Does it have the right skills to...

...resources used in delivering service?

* Has a separate work-control unit been instituted within the %%%maintenance%%% organization?

* Do primary duties assigned to the work-control unit include centralized work reception, facility...

...and estimating, work-order preparation and approval, shop-load planning, technical support for long-range %%%maintenance%%% planning and budgeting, project management and contract administration?

* Has work control been assigned responsibilities for...

...Is the work-reception function staffed with personnel who are well-versed in facilities and %%%maintenance%%% practices, trained to obtain complete and accurate information, and capable of providing decisive information?

* Do...

...methods. In this scenario, a representative sample of workers is selected and given self-reporting %%%forms%%% to %%%fill%%% %%%out%%% for a period of time, up to several weeks, during which they will report on...

...principal activities.

The assessment should include extensive interviews with management and supervisory staff of the %%%maintenance%%% organization, as well as administrators, faculty, staff and students. Validation is critical to any assessment...

...tools, equipment and materials. An energy audit or environmental audit may be part of the %%%maintenance%%%-management assessment.

UTILIZING RESULTS

Based on the findings, a report is developed with specific recommendations...

...should be accompanied by summaries of all the data, including spreadsheets and diagrams.

Revamping a %%%maintenance%%% organization

The University of Virginia, Charlottesville, recently had an assessment done on the %%%maintenance%%% management of its operations on the main campus and of its central plant organization. Administrators wanted an analysis of supervisory and direct labor %%%maintenance%%% staffing in terms of:

* Size and composition.

* Ratio of supervisors to tradespeople.

* Organizational structure, chain...

...the conclusion of the study, a follow-up analysis of the executive level
of the %%%maintenance%%% organization was conducted. This resulted in
recommendations for a new organizational structure, position descriptions
for...president and manager, facilities division, Parsons Brinckerhoff
Energy Services, Herndon, Va. The firm conducted the %%%maintenance%%%
-management assessment of the University of Virginia, Charlottesville.

DESCRIPTORS: %%%Maintenance%%%--...

...%%%Maintenance%%% and %%%repair%%%;

1/2,AB,KWIC/5   (Item 4 from file: 211)
DIALOG(R)File 211:IAC Newsearch(TM)
(c) 1998 Info. Access Co. All rts. reserv.
>>>Accession number 8825625 is unavailable
? begin 275
         23sep98 12:50:26 User219455 Session D517.4
             $0.45   0.139 DialUnits File94
                $1.10 1 Type(s) in Format 4 (UDF)
             $1.10 1 Types
         $1.55 Estimated cost File94
             $0.39   0.092 DialUnits File211
                $1.00 1 Type(s) in Format 2 (UDF)
                $4.00 2 Type(s) in Format 5 (UDF)
             $5.00 3 Types
         $5.39 Estimated cost File211
             OneSearch, 2 files, 0.231 DialUnits FileOS
         $0.79 TYMNET
         $7.73 Estimated cost this search
         $22.38 Estimated total session cost   9.473 DialUnits

File 275:IAC(SM) Computer Database(TM) 1983-1998/Sep 22
         (c) 1998 Info Access Co

         Set Items Description
         --- ----- -----------
? s (maintenance or maintainance) and repair and (fill?(3w)out)(20n) (form or forms or table or tables)
             31552 MAINTENANCE
                41 MAINTAINANCE
             9030 REPAIR
             37376 FILL?
             214644 OUT
             66557 FORM
             30757 FORMS
             66716 TABLE
             19662 TABLES
               1824 FILL?(3W)OUT(20N)(((FORM OR FORMS) OR TABLE) OR TABLES)
         S1   21 (MAINTENANCE OR MAINTAINANCE) AND REPAIR AND
                 (FILL?(3W)OUT)(20N) (FORM OR FORMS OR TABLE OR TABLES)

?t 1/ti,py/1-21

1/TI,PY/1
DIALOG(R)File 275:(c) 1998 Info Access Co. All rts. reserv.

Telecom tools and test equipment. (includes related article on where to
  shop)(Buyers Guide)
1998

1/TI,PY/2
DIALOG(R)File 275:(c) 1998 Info Access Co. All rts. reserv.

Learning points on the Internet.(technology-specific courses available on
  the Internet) (Internet/Web/Online Service Information)
1998

1/TI,PY/3
DIALOG(R)File 275:(c) 1998 Info Access Co. All rts. reserv.

Build your Web site. (Web site development) (Internet/Web/Online Service
  Information)
1997

1/TI,PY/4
DIALOG(R)File 275:(c) 1998 Info Access Co. All rts. reserv.

Cruisin' without a bruisin': online resources for buying a car.(Brief
  Article)(Directory)
1997

1/TI,PY/5
DIALOG(R)File 275:(c) 1998 Info Access Co. All rts. reserv.

Nets Inc.'s Manzi Unveils PSDI Web Commerce Deal.
1997

1/TI,PY/6
DIALOG(R)File 275:(c) 1998 Info Access Co. All rts. reserv.

1,001 best Internet tips. (descriptions of Internet products, services)
  (Technology Information) (Technology Tutorial)(Tutorial)
1997

1/TI,PY/7
DIALOG(R)File 275:(c) 1998 Info Access Co. All rts. reserv.

Web overhaul. (Chrysler's site) (includes related article on on-line
shopping sites and J.D. Power and Associates' Power Information
Network)(PC Week Executive) (Company Business and Marketing)
1996

1/TI,PY/8
DIALOG(R)File 275:(c) 1998 Info Access Co. All rts. reserv.

After the plan's approved: keeping the technology planning process alive
and moving. (includes sample form on accessing the effectiveness of
technology integration)
1996

1/TI,PY/9
DIALOG(R)File 275:(c) 1998 Info Access Co. All rts. reserv.

Star ratings: hardware and software reviews at a glance. (Directory)
1995

1/TI,PY/10
DIALOG(R)File 275:(c) 1998 Info Access Co. All rts. reserv.

Star ratings: hardware and software reviews at a glance. (Directory)
1995

1/TI,PY/11
DIALOG(R)File 275:(c) 1998 Info Access Co. All rts. reserv.

Star ratings: hardware and software reviews at a glance. (Directory)
1995

1/TI,PY/12
DIALOG(R)File 275:(c) 1998 Info Access Co. All rts. reserv.

Benchmarks for your telecomm operation.
1995

1/TI,PY/13
DIALOG(R)File 275:(c) 1998 Info Access Co. All rts. reserv.

Strategic application of organizational data through customer relational
databases.
1993

1/TI,PY/14

Managed-care pharmacy: an integrated MIS approach. (management information systems)
1993

1/TI,PY/15

Electronic delivery: matching technology to requirements. (the Seybold San Francisco '92 conference discusses electronic document delivery) (Cover Story)
1992

1/TI,PY/16

The purchasing option: how to make the right decisions. (Management Tutorial) (Tutorial)
1992

1/TI,PY/17

Survey of expert critiquing systems: practical and theoretical frontiers. (programs that critique human experts)(Computing Practices) (Technical)
1992

1/TI,PY/18

Return to vendor: the right way to make mail-order returns. (procedural steps to be followed when returning goods to a vendor) (Strategies, includes related articles on reasons for returning mail-order purchases, how microcomputer orders are processed, how to minimize problems and the resale of returned computers) (Tutorial)
1992

1/TI,PY/19

Disk utilities roundup. (includes related article on buying disk utilities)
1991

1/TI,PY/20

Multimedia in AI. (panel discussion at the Artificial Intelligence
   Applications conference)
1991

1/TI,PY/21
DIALOG(R)File 275:(c) 1998 Info Access Co. All rts. reserv.

San Diego Gas and Electric.
1986
? t 1/2,ab,kwic/13,17,21

1/2,AB,KWIC/13
DIALOG(R)File 275:IAC(SM) Computer Database(TM)
(c) 1998 Info Access Co. All rts. reserv.

01621541   SUPPLIER NUMBER: 14426358   (USE FORMAT 7 OR 9 FOR FULL TEXT)
Strategic application of organizational data through customer relational
   databases.
Kohli, Rajiv; Gupta, Jatinder N.D.
Journal of Systems Management, v44, n10, p22(7)
Oct, 1993
ISSN: 0022-4839   LANGUAGE: ENGLISH   RECORD TYPE: FULLTEXT; ABSTRACT
WORD COUNT: 5201   LINE COUNT: 00430

ABSTRACT: Effective customer relational databases (CRD) can help an
organization plan new products, enter new markets, cut advertising costs
and improve customer service by collecting, organizing and analyzing
customer data. Data can be collected via questionnaires, credit records,
letters, calls and mailing lists and can be used to determine present and
future customer needs. Building an effective database requires specific
steps, including the identification of organizational goals and data
collection and storage needs. Data should be easily accessible,
manipulated, utilized and continuously updated. Implementing a CRD involves
setting up a corporate-wide policy regarding model customer profiles.
Relationships between customers and between customers and products need to
be determined to direct a company toward potential products and markets.
In-house training is essential in determining a CRD's viability and making
it accessible to all levels of management. Past limitations of CRDs were
caused by poor planning, lack of accessible data and improper organization
of data.

SPECIAL FEATURES: illustration; table
DESCRIPTORS: Relational Database; Utilization; Customer Profiles;
   Marketing Applications; Strategic Planning
FILE SEGMENT: TI File 148

...   experience in the minds of individuals. In some cases, the data is
either on paper %%%forms%%% %%%filled%%% %%%out%%% by customers or
available only as photocopies of the customers' records. Furthermore, data
which can...

...first transaction with the organization, survey questionnaires sent out to customers, credit records, purchase history, %%%repair%%% or service records, requests for refunds and complaint or commendation letters.

External sources of customer...and model of cars, will allow the small business to solicit business for regular car %%%maintenance%%% services and automobile accessories. Similarly, large businesses have established mechanisms for continuous collection of customer...their organizations. In fact, being small may provide them with an added advantage in the %%%maintenance%%% of such a CRD since these small businesses serve a very well defined market niche...

1/2,AB,KWIC/17
DIALOG(R)File 275:IAC(SM) Computer Database(TM)
(c) 1998 Info Access Co. All rts. reserv.

01511068   SUPPLIER NUMBER: 12068462   (USE FORMAT 7 OR 9 FOR FULL TEXT)
Survey of expert critiquing systems: practical and theoretical frontiers.
  (programs that critique human experts)(Computing Practices) (Technical)
Silverman, Barry G.
Communications of the ACM, v35, n4, p106(22)
April, 1992
DOCUMENT TYPE: Technical   ISSN: 0001-0782   LANGUAGE: ENGLISH
RECORD TYPE: FULLTEXT; ABSTRACT
WORD COUNT: 16383   LINE COUNT: 01310

ABSTRACT: Perry Miller of Yale University coined the term 'critic' to refer to a program that critiques a human expert; Miller's use of the term refers to a program that critiques human-generated solutions, while Karl Popper defines a critic as a way of creating statements such that their falsifiability is maximized. The definition of critics here includes programs that first cause their users to maximize the falsifiability of their statements and then check to see if errors exist; good critic programs doubt and trap users into revealing their errors and then try to help them make necessary repairs. Developments in critiquing systems are surveyed with the intention of helping developers capitalize on successful critiquing techniques. Critic programs analyze user task results before, during or after the task using the problem description; they then provide feedback, criticism and explanation to the user. How critiquing works and five categories of critiquing system use are described.

SPECIAL FEATURES: illustration; table; chart
DESCRIPTORS: Software Design; Program Development Techniques; Modeling; Research and Development; Theoretical Research; Error Analysis; Expert systems; Problem solving
FILE SEGMENT: CD File 275

...   second trend is the appearance of document generators, most of which are intelligent templates or %%%fill%%%-%%%out%%%-the-%%%forms%%% types of programs, yet a few are active expert systems. Merging these two types of...specified, application-specific integrated circuit designs.
Called the Design Advisor(TM) it had a truth %%%maintenance%%% system, and

its differential analyzer used rules with a frame representation to reason about the...checking, and subsumption correctness checking. Each of these services includes support for fault identification and %%%repair%%%. At a more global KB-wide perspective, several tools examine the full KB for consistency...B.G. Expert Critics: Operationalizing the judgment/decisionmaking literature as a theory of bugs and %%%repair%%% strategies. Knowledge Acquisition, 3, 2 (June 1991) (tent.).

[25] Silverman, B.G. Evaluating and refining...

1/2,AB,KWIC/21
DIALOG(R)File 275:IAC(SM) Computer Database(TM)
(c) 1998 Info Access Co. All rts. reserv.

01177591   SUPPLIER NUMBER: 04421264   (USE FORMAT 7 OR 9 FOR FULL TEXT)
San Diego Gas and Electric.
Call, Barbara
PC Week, v3, n40, p53(3)
Oct 7, 1986
ISSN: 0740-1604   LANGUAGE: ENGLISH   RECORD TYPE: FULLTEXT; ABSTRACT
WORD COUNT: 2147   LINE COUNT: 00168

ABSTRACT: San Diego Gas and Electric will enact an extensive cost-to-benefit analysis before it implements any more personal computers (PCs). The potential user has to complete a cost-justification form and to detail the hard savings, like a cut in personnel, or the soft savings, like a cut in the time needed to finish a job or access the utility's IBM 3081K mainframe computers. Due both to tight acquisition policies and to rigorous cost-to-benefit justification, the majority of the working applications within the company have either increased the efficiency of operations or helped San Diego Gas and Electric confront its competition directly.

SPECIAL FEATURES: illustration; photograph; table
COMPANY NAMES: San Diego Gas and Electric Co.--Data processing
DESCRIPTORS: Computers; Utilities; Personal Computers; Companies; Strategic Planning
SIC CODES: 4900 ELECTRIC, GAS, AND SANITARY SERVICES
FILE SEGMENT: CD File 275

...   survive the scrutiny of a strict methodology or they will go nowhere.

That methodology includes %%%filling%%% %%%out%%% a cost-justification %%%form%%% and indicating "hard' savings, such as a reduction in personnel, or "soft' savings, such a...

...Each power plant is equipped with one or more turbine generators and boilers, and most %%%maintenance%%% is handled through scheduled shutdowns, where the firm plans ahead to shut down the plant and complete routine %%%maintenance%%%, Mr. Lehmann explained.

Aside from scheduled shutdowns, the plants sometimes must be closed for emergencywhich can be very expensive. That expense is compounded by the cost of diverting %%%repair%%% personnel, during this downtime, to locate

and fix the problem.
    To help prevent these kinds...

...has several advantages over previous methods, Lehmann said. Prior to
using predictive analysis, he explained, %%%maintenance%%% crews had to
guess which sections of the plant might need replacement of parts in...

...or approximately one-fifth of the company's employees, a call to assist
with the %%%repair%%% of downed lines or broken gas pipes can come at any
time, day or night...

...the cracks.
    Last week, the database application was installed and is running in
all six %%%repair%%%-crew districts, and Mr. Diggs said he looks forward to
vast improvements in quality control.
    While preventive-%%%maintenance%%% and employee-tracking applications
are aimed at improving company performance, SDG&E is acquiring PC...
? begin 647
        23sep98 12:55:41 User219455 Session D517.5
            $1.52   0.290 DialUnits File275
                $7.20 3 Type(s) in Format 5 (UDF)
                $0.00 21 Type(s) in Format 6 (UDF)
                $7.20 24 Types
            $8.72 Estimated cost File275
            $1.20 TYMNET
            $9.92 Estimated cost this search
            $32.30 Estimated total session cost   9.764 DialUnits

File 647:CMP Computer Fulltext 1988-1998/Aug W5
        (c) 1998 CMP

        Set Items Description
        --- ----- -----------
? s (maintenance or maintainance) and repair and (fill?(3w)out)(20n) (form or forms or table or tables)
        9459 MAINTENANCE
           4 MAINTAINANCE
        2942 REPAIR
       14522 FILL?
      112141 OUT
       22225 FORM
        7824 FORMS
        6307 TABLE
        3301 TABLES
         612 FILL?(3W)OUT(20N)(((FORM OR FORMS) OR TABLE) OR TABLES)
    S1   5 (MAINTENANCE OR MAINTAINANCE) AND REPAIR AND
            (FILL?(3W)OUT)(20N) (FORM OR FORMS OR TABLE OR TABLES)
? t 1/ti,ab/1-5

1/TI,AB/1

Rev your search engine: Cruisin' the info highway for cars   (On-line

Connections-Exploring The Information Highway)
TEXT:
    As soon as Sandra Kinsler laid eyes on the new Land Rover Discovery
SE7 at last winter's New York Auto Show, she knew she had to take it out
for more than just a spin-even if she couldn't buy it. So the freelance
marketing consultant-and driving force behind the Woman Motorist Web site
(http://www.womanmotorist.com/)-persuaded the Land Rover folks to loan
her the sporty machine for a few exhilirating days. Before long, she was
zipping over Manhattan's potholed streets, then steering through the
slick ice, snow, mud and running water covering the back roads of upstate
New York.

1/TI,AB/2
DIALOG(R)File 647:(c) 1998 CMP. All rts. reserv.

Guidelines for managers who export to the U.S.S.R.-INS AND OUTS OF TECH
    TRADE
TEXT:
    Retired licensing officer

1/TI,AB/3
DIALOG(R)File 647:(c) 1998 CMP. All rts. reserv.

Guidelines for managers who export to the U.S.S.R.-INS AND OUTS OF TECH
    TRADE
TEXT:
    Retired licensing officer

1/TI,AB/4
DIALOG(R)File 647:(c) 1998 CMP. All rts. reserv.

Service With a Smile...and an agreement
TEXT:
    What we have here is a failure to communicate-perhaps the best- known
modern reflection on unsuccessful interpersonal relationships-is also a
classic description of the dealings between many network managers and the
people to whom they provide network services. Although I doubt service
providers and recipients can ever be in complete accord, proper
communication can eliminate much of the annoyance and distrust inherent in
the relationship. One tool for establishing reasonable expectations for
both parties, as I mentioned in my June 1992 column on reliability, is the
Service Level Agreement (SLA).

1/TI,AB/5
DIALOG(R)File 647:(c) 1998 CMP. All rts. reserv.

The Enemy is Us
TEXT:

Years ago, Walt Kelly's lovable character Pogo uttered the famous statement, "We have met the enemy, and they is us." Nowhere is this truer than in the effort slowly moving through corporate America to establish Electronic Data Interchange (EDI) systems. While some technological difficulties remain with EDI principally in the work needed to reconcile its different formats and versions with the applications EDI enables the technology is relatively well-known and stable. The organizational structures to accommodate EDI, however, are neither well-known nor stable. Implementing EDI so that its major economies will be realized means fundamentally changing operational relationships in several areas. Information Systems (IS) has to work closely with purchasing. Top management often has to devise a strategy to accomplish a smooth downsizing of purchasingstaff without losing the purchasing department's cooperation. Within IS, EDI applications developers have to work with developers of traditional business applications to ensure adequate integration.

? begin 652,653,654

    23sep98 12:57:22 User219455 Session D517.6
        $0.71   0.142 DialUnits File647
         $10.00 5 Type(s) in Format 4 (UDF)
       $10.00 5 Types
   $10.71 Estimated cost File647
   $0.40 TYMNET
   $11.11 Estimated cost this search
   $43.41 Estimated total session cost 9.905 DialUnits

SYSTEM:OS - DIALOG OneSearch
 File 652:US Patents Fulltext 1971-1979
      (c) format only 1998 Knight-Ridder Info
*File 652: Reassignment data now current through 08/20/98
Reexamination, extension, expiration, reinstatement updated weekly.
 File 653:US Pat.Fulltext 1980-1989
      (c) format only 1998 Knight-Ridder Info
*File 653: Reassignment data now current through 08/20/98.
Reexamination, extension, expiration, reinstatement updated weekly.
 File 654:US Pat.Full. 1990-1998/Sep 15
      (c) format only 1998 The Dialog Corp.
*File 654: Reassignment data now current through 08/20/98.
Reexamination, extension, expiration, reinstatement updated weekly.

  Set Items Description
  --- ----- -----------
? s (maintenance or maintainance) and repair and (fill?(3w)out)(20n) (form or forms or table or tables)
Processing
Processing
Processing
Processing
Processing
Processing
    161343 MAINTENANCE
    1247 MAINTAINANCE
    67784 REPAIR

```
     547602 FILL?
    1507507 OUT
    1750785 FORM
     800919 FORMS
     544449 TABLE
     109974 TABLES
        960 FILL?(3W)OUT(20N)(((FORM OR FORMS) OR TABLE) OR TABLES)
  S1   17 (MAINTENANCE OR MAINTAINANCE) AND REPAIR AND
           (FILL?(3W)OUT)(20N) (FORM OR FORMS OR TABLE OR TABLES)
? t 1/2,ab/1-17
```

1/2,AB/1   (Item 1 from file: 652)
DIALOG(R)File 652:US Patents Fulltext
(c) format only 1998 Knight-Ridder Info. All rts. reserv.

        00527409
Utility
PROCEDURE AND PRECAST BUILDING ELEMENTS MADE OF CONCRETE OR REINFORCED
CONCRETE FOR THE CONSTRUCTION OF BUILDINGS OR SKELETONS

PATENT NO.: 3,600,862
ISSUED: August 24, 1971 (19710824)
INVENTOR(s): Eckert, Gunther Ludwig, Hohenschaftlarn Germany, DT, US
        (United States of America)
ASSIGNEE(s): Kirchhoff, Ernst, DT, US (United States of America)
        [Assignee Code(s):
APPL. NO.: 4-878,999
FILED: December 08, 1969 (19691208)
PRIORITY: K-60-792, DE (Germany), November 25, 1966 (19661125)
U.S. CLASS: 52-236.9 cross ref: D25-61; 52-79.11; 52-79.14; 52-251; 52-259
        ; 52-437
INTL CLASS: [ ] e04b 2-38; E04B 2-52; E04B 5-08
FIELD OF SEARCH: 52-79; 52-251; 52-252; 52-236; 52-241; 52-258; 52-259;
        52-272; 52-280; 52-281; 52-284; 52-415; 52-437; 52-262; 52-741
        ; 52-743; 52-137; 52-136; 52-270
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2,058,285	10/1936	Amescua	52-262
2,851,873	9/1958	Wheeler-Necholson	52-262

            NON-U.S. PATENT DOCUMENTS

126,843	1948	AU (Australia)	
1,717,265	1958	FR (France)	
AD. 64,548	1955	FR (France)	

PRIMARY EXAMINER: Murtogh, John E.
ATTORNEY, AGENT, OR FIRM: Ward, Haselton, McElhannon, Brooks & Fitzpatrick
CLAIMS: 15

DRAWING PAGES: 8
DRAWING FIGURES: 18
ART UNIT: 356
FULL TEXT: 392 lines

ABSTRACT

A skeleton for a building comprising precast frame-shaped elements and precast horizontal support beams which rest on the frame-shaped elements. The frame-shaped elements are placed along at least two mutually facing outer sides of the building and in adjacent or superposed relationship to form intermediate spaces therebetween. The precast horizontal beams are placed on the intermediate edges of the adjacent frame elements and cast in situ concrete is placed in the intermediate spaces defined between the frame-shaped elements.

1/2,AB/2   (Item 1 from file: 653)
DIALOG(R)File 653:US Pat.Fulltext

01820159
Utility
COMBINATION BAR CODE AND MARK-SENSE READER

PATENT NO.: 4,877,948
ISSUED: October 31, 1989 (19891031)
INVENTOR(s): Krueger, Loren L., 4834 Merilee Dr., Minnetonka, MN
        (Minnesota), US (United States of America), 55343 68000]
EXTRA INFO: Assignment transaction [Reassigned], recorded June 25,
        1987 (19870625)
        Expired, effective November 5, 1997 (19971105), recorded in
        O.G. of January 13, 1998 (19980113)
APPL. NO.: 7-66,163
FILED: June 25, 1987 (19870625)
U.S. CLASS: 235-449 cross ref: 235-376; 235-454; 235-456; 235-474
INTL CLASS: [4] G06K 7-08
FIELD OF SEARCH: 235-449; 235-376; 235-454; 235-476

References Cited

U.S. PATENT DOCUMENTS

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3,760,161	9/1973	Lohne et al.	
3,949,363	4/1976	Holm	
4,013,893	3/1977	Hertig	235-449
4,298,859	11/1981	Feilchenfeld	235-456
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4,542,528	9/1985	Sanner et al.	

NON-U.S. PATENT DOCUMENTS

58-12073 7/1981 JP (Japan)

PRIMARY EXAMINER: Pitts, Harold I.
ATTORNEY, AGENT, OR FIRM: Shudy, Jr., John G.
CLAIMS: 8
EXEMPLARY CLAIM: 1
DRAWING PAGES: 3
DRAWING FIGURES: 3
ART UNIT: 235
FULL TEXT: 272 lines
               ABSTRACT

A combination reader capable of reading a document containing both bar
coded and manually marked information. The read information is processed,
displayed and stored.

1/2,AB/3   (Item 2 from file: 653)
DIALOG(R)File 653:US Pat.Fulltext
(c) format only 1998 Knight-Ridder Info. All rts. reserv.

        01807863
Utility
COMPUTER CONTROLLED RENTAL AND SALE SYSTEM AND METHOD FOR A SUPERMARKET AND
THE LIKE

PATENT NO.: 4,866,661
ISSUED: September 12, 1989 (19890912)
INVENTOR(s): de Prins, Maurits L., Verhoevenlei, 15 Brasschaat 2130, BE
        (Belgium) 68000]
EXTRA INFO: Expired, effective September 12, 1993 (19930912), recorded in
        O.G. of November 30, 1993 (19931130)
APPL. NO.: 6-844,164
FILED: March 26, 1986 (19860326)
U.S. CLASS: 235-382 cross ref: 235-380; 235-381; 235-383; 235-385;
        364-DIG.002; 364-918; 364-918.5; 364-918.51; 364-918.7;
        364-918.9; 364-921.8; 364-927.2; 364-927.4; 364-932; 364-932.1
        ; 364-932.62; 364-932.7; 364-947; 364-947.2; 364-948.2;
        364-949.96; 414-273
INTL CLASS: [4] G06F 15-21; G06F 7-10
FIELD OF SEARCH: 235-380; 235-381; 235-382; 235-383; 235-385; 364-200MFFILE
        ; 364-900MSFILE; 414-273

        References Cited

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50-26597	3/1975	JP (Japan)
50-106698	8/1975	JP (Japan)
52-83286	7/1977	JP (Japan)
WO8501812	4/1985	WO (World Intellectual Property Org)
2143662	2/1985	GB (United Kingdom)

OTHER REFERENCES

"Video Vendor" brochure; Synopco, Inc.; 3 pages; Copyright 1985.

Term-Tronics brochure; 4 pages; Oct. 1985.

ABSTRACT

A system and method for alloying a customer to purchase or rent items from a locked cabinet without the intervention of store personnel. The authorized customer first inputs a membership card and a secret number. If these are correct, the system unlocks the locked cabinets, and the customer is allowed to examine all of the contents in the unlocked cabinet at his or her leisure. The computer continuously monitors the removal of all items from the unlocked cabinet. The customer reads in identifying information from each of the selected items. When the number of items that have been removed equals the number of items that have been read in by the customer, the computer allows the doors of the cabinet to be relocked, and the

customer is provided with a customer slip indicating the items that have been selected. The system utilizes a similar method for the return of previously rented items. In the rental context, return of rental items can be performed in parallel with rental of items. High security is achieved without employee monitoring since the customer is held responsible for all items removed during the time that the cabinet is unlocked.

1/2,AB/4   (Item 3 from file: 653)
DIALOG(R)File 653:US Pat.Fulltext
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    01626481
Utility
APPARATUS FOR PRODUCING MINERAL FIBRES FROM SILICATE RAW MATERIALS SUCH AS BASALT, IN PARTICULAR BY BLAST DRAWING

PATENT NO.: 4,698,085
ISSUED: October 06, 1987 (19871006)
INVENTOR(s): Bengl, Dieter, Mutterstadt, DE (Germany)
        Horres, Johannes, Ladenburg, DE (Germany)
ASSIGNEE(s): Grunzweig & Hartmann und Glasfaser AG, (A Non-U.S. Company or
        Corporation), DE (Germany)
        [Assignee Code(s): 36220]
APPL. NO.: 6-839,226
FILED: March 13, 1986 (19860313)
PRIORITY: 3509425, DE (Germany), March 15, 1985 (19850315)
U.S. CLASS: 65-525 cross ref: 65-27; 65-356; 65-526; 65-528; 65-529;
        156-62.4
INTL CLASS: [4] C03B 37-06
FIELD OF SEARCH: 65-4.4; 65-9; 65-7; 65-16; 65-11.1; 65-12; 65-3.43; 65-356
        ; 65-27; 156-62.4
                References Cited

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4,594,086	6/1986	Mosnier	65-4.4

PRIMARY EXAMINER: Lindsay, Robert L.
ATTORNEY, AGENT, OR FIRM: Finnegan, Henderson, Farabow, Garrett & Dunner
CLAIMS: 4
EXEMPLARY CLAIM: 1
DRAWING PAGES: 1
DRAWING FIGURES: 2
ART UNIT: 133
FULL TEXT: 282 lines

            ABSTRACT

In the production of bonded mineral fibre wool, binder is injected in the
chute (16) onto the fibres, as a result of which there is a tendency for
the fibres to adhere to the walls of the chute (16) and to form
encrustations due to binder becoming cured in the course of time. To avoid
such encrustations, which can cause production shortfalls, the
circumferential walls (18, 20) of the chute are constructed as jacketed
walls and are cooled by passing cooling liquid in the hollow space (30)
between the inner and outer surface portions (28, 29). It has been found,
surprisingly, that as a result no solid encrustations can form even over
prolonged periods, since temporarily adhering fibres cannot in fact become
adhesively bonded due to insufficient curing of the binder at the low
temperatures, but are continuously removed from the wall again. In contrast
to the permanent cleaning of the chute walls, for example in the form of
rotary walls, not only is the considerable expenditure in terms of
investment and %%%maintenance%%% and/or unforeseeable plant shutdowns
avoided, but also there is obtained dimensionally accurate sealing of the
circumferential walls (18, 20) of the chute (16), so that there is no
occurrence of fibre losses or attraction of unwanted air.

1/2,AB/5   (Item 1 from file: 654)
DIALOG(R)File 654:US Pat.Full.
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        02835800
Utility
SYSTEM AND METHOD FOR CONTROLLING THE STORAGE OF DATA WITHIN A PORTABLE
MEMORY

PATENT NO.: 5,801,364
ISSUED: September 01, 1998 (19980901)
INVENTOR(s): Kara, Salim G., Houston, TX (Texas), US (United States of
        America)
        Whitney, Jonathan W., Houston, TX (Texas), US (United States
        of America)
        Gressett, David M., Houston, TX (Texas), US (United States of
        America)
ASSIGNEE(s): E-Stamp Corporation, (A U.S. Company or Corporation), Houston,
        TX (Texas), US (United States of America)
        [Assignee Code(s):
APPL. NO.: 8-515,988
FILED: August 16, 1995 (19950816)

        REFERENCE TO RELATED APPLICATIONS
    The present application is a continuation-in-part of U.S. application
Ser. No. 08-263,751, filed Jun. 22, 1994, and entitled "System and Method
for Storing, Retrieving and Automatically Printing Postage on Mail," now
U.S. Pat. No. 5,606,507 issued Feb. 25, 1997, which in turn is a
continuation-in-part of U.S. application Ser. No. 08-176,716, filed Jan. 3,
1994, and entitled "System and Method for Automatically Printing Postage on
Mail", now U.S. Pat. No. 5,510,992 issued Apr. 23, 1996.

U.S. CLASS: 235-375 cross ref: 235-492
INTL CLASS: [6] G06K 7-10
FIELD OF SEARCH: 235-375; 235-492

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U.S. PATENT DOCUMENTS

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5,544,246	8/1996	Mandelbaum et al.	380-23
5,587,955	12/1996	Lee et al.	235-492

PRIMARY EXAMINER: Hajec, Donald T.
ASST. EXAMINER: Tremblay, Mark
ATTORNEY, AGENT, OR FIRM: Fulbright & Jaworski L.L.P.
CLAIMS: 30
EXEMPLARY CLAIM: 1
DRAWING PAGES: 23
DRAWING FIGURES: 38
ART UNIT: 254
FULL TEXT: 1523 lines

ABSTRACT

A system and method for printing a postage indicia, including a desired postage amount and encrypted information, onto a piece of mail. The mail when inserted into the normal mail system can be verified as having legally issued postage through realtime access to a central registered user database. A user takes a powerable postal dispensing device to an

authorized agent of a postal authority in order to obtain a replenishment of the amount of postage stored within the portable postage dispensing device. A desired amount of postage is entered into the dispensing device by an authorized agent through a host processor-based system. The user is then able to access this stored postage at the user's location through a complementary host processor-based system. The authorized agent uses a PC bond system designed to allow data to be entered into the portable dispensing device only upon exercising a series of comprehensive checks based, in part, by data stored within the portable dispensing device. The postal dispensing device has an operating program which defines all aspects and extents of its possible behaviors. Access to its facilities is allowed only after stringent security measures have been met.

1/2,AB/6   (Item 2 from file: 654)
DIALOG(R)File 654:US Pat.Full.
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02830701
Utility
SYSTEM AND METHOD FOR CONTROLLING THE DISPENSING OF AN AUTHENTICATING INDICIA

PATENT NO.: 5,796,834
ISSUED: August 18, 1998 (19980818)
INVENTOR(s): Whitney, Jonathan W., Houston, TX (Texas), US (United States
        of America)
        Gressett, David M., Houston, TX (Texas), US (United States of
        America)
        Kara, Salim G., Houston, TX (Texas), US (United States of
        America)
ASSIGNEE(s): E-Stamp Corporation, (A U.S. Company or Corporation), Houston,
        TX (Texas), US (United States of America)
        [Assignee Code(s):
APPL. NO.: 8-812,803
FILED: March 06, 1997 (19970306)

REFERENCE TO RELATED APPLICATIONS
The present application is a continuation application of pending application Ser. No. 08-516,010, entitled "SYSTEM AND METHOD FOR CONTROLLING THE DISPENSING OF AN AUTHENTICATING INDICIA," filed Aug. 16, 1995, which is a continuation-in-part application of application Ser. No. 08-263,751, entitled "SYSTEM AND METHOD FOR STORING, RETRIEVING AND AUTOMATICALLY PRINTING POSTAGE ON MAIL," filed Jun. 22, 1994, now issued as U.S. Pat. No. 5,606,507, which in turn is a continuation-in-part application of application Ser. No. 08-176,716, entitled "SYSTEM AND METHOD FOR AUTOMATICALLY PRINTING POSTAGE ON MAIL," filed Jan. 3, 1994, now issued as U.S. Pat. No. 5,510,992.

U.S. CLASS: 380-25 cross ref: 380-51; 705-44; 705-401; 705-405; 705-408;
        705-411
INTL CLASS: [6] H04K 1-00; G06F 17-00; H04L 9-00

FIELD OF SEARCH: 380-51; 380-25; 364-464.18; 364-464.21; 364-464.12;
    705-401; 705-44; 705-408; 705-405; 705-411

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4,757,537	7/1988	Edelmann	380-51
4,763,271	8/1988	Field	364-466
4,775,246	10/1988	Edelmann et al.	380-23
4,800,506	1/1989	Axelrod et al.	364-478
4,802,218	1/1989	Wright et al.	380-23
4,812,994	3/1989	Taylor et al.	364-464.2
4,831,555	5/1989	Sansone et al.	364-519
4,864,618	9/1989	Wright et al.	380-51
4,868,757	9/1989	Gil	364-464.3
4,900,903	2/1990	Wright et al.	235-380
4,900,904	2/1990	Wright et al.	235-381
4,901,241	2/1990	Schneck	364-464.2
5,065,000	11/1991	Pusic	235-381
5,111,030	5/1992	Brasington et al.	235-375
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2580844	10/1986	FR (France)
225121	7/1992	GB (United Kingdom)
WO8801818	3/1988	WO (World Intellectual Property Org)

PRIMARY EXAMINER: Buczinski, Stephen C.
ATTORNEY, AGENT, OR FIRM: Fulbright & Jaworski L.L.P.
CLAIMS: 41
EXEMPLARY CLAIM: 1
DRAWING PAGES: 23
DRAWING FIGURES: 35
ART UNIT: 362
FULL TEXT: 1427 lines

ABSTRACT

There is disclosed a system and method for dispensing postage (or other graphical security indicia) electronically by using a portable processor containing a maximum amount of preauthorized postage which can be applied to any piece of mail. The portable processor can be refilled at various

locations through the use of a closed-loop system which relies upon a database of users who are preregistered in the database. Upon refill of the portable processor an expiration date is stored therein. Thereafter, each transaction includes reference to this expiration date and a secure realtime clock in order to determine if the portable processor may dispense postage. Additionally, the realtime clock is utilized to provide date stamping of the indicia generated.

1/2,AB/7   (Item 3 from file: 654)
DIALOG(R)File 654:US Pat.Full.
(c) format only 1998 The Dialog Corp. All rts. reserv.

02827816
Utility
METHOD AND APPARATUS FOR A CRYPTOGRAPHICALLY ASSISTED COMMERCIAL NETWORK SYSTEM DESIGNED TO FACILITATE BUYER-DRIVEN CONDITIONAL PURCHASE OFFERS

PATENT NO.: 5,794,207
ISSUED: August 11, 1998 (19980811)
INVENTOR(s): Walker, Jay S., Ridgefield, CT (Connecticut), US (United
        States of America)
        Schneier, Bruce, Oak Park, IL (Illinois), US (United States of
        America)
        Jorasch, James A., Stamford, CT (Connecticut), US (United
        States of America)
ASSIGNEE(s): Walker Asset Management Limited Partnership, (A U.S. Company
        or Corporation), Stamford, CT (Connecticut), US (United States
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        [Assignee Code(s):
APPL. NO.: 8-707,660
FILED: September 04, 1996 (19960904)
U.S. CLASS: 705-23 cross ref: 380-23; 380-25; 380-49; 705-26
INTL CLASS: [6] G06F 15-20
FIELD OF SEARCH: 395-226; 395-227; 395-237; 395-238; 395-239; 395-244;
        380-23; 380-24; 380-25; 380-49; 705-26; 705-27; 705-37; 705-38
        ; 705-39; 705-44; 705-1; 705-5; 705-6

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4,903,201	2/1990	Wagner	364-408
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ABSTRACT

The present invention is a method and apparatus for effectuating bilateral buyer-driven commerce. The present invention allows prospective buyers of goods and services to communicate a binding purchase offer globally to potential sellers, for sellers conveniently to search for relevant buyer purchase offers, and for sellers potentially to bind a buyer to a contract based on the buyer's purchase offer. In a preferred embodiment, the apparatus of the present invention includes a controller which receives binding purchase offers from prospective buyers. The controller makes purchase offers available globally to potential sellers. Potential sellers then have the option to accept a purchase offer and thus bind the corresponding buyer to a contract. The method and apparatus of the present invention have applications on the Internet as well as conventional communications systems such as voice telephony.

1/2,AB/8   (Item 4 from file: 654)
DIALOG(R)File 654:US Pat.Full.
(c) format only 1998 The Dialog Corp. All rts. reserv.

     02811428
Utility
COMPUTER AIDED %%%MAINTENANCE%%% AND %%%REPAIR%%% INFORMATION SYSTEM FOR EQUIPMENT SUBJECT TO REGULATORY COMPLIANCE

PATENT NO.: 5,778,381
ISSUED: July 07, 1998 (19980707)
INVENTOR(s): Sandifer, Michael A., Millbrae, CA (California), US (United
     States of America)
ASSIGNEE(s): Aircraft Technical Publishers, (A U.S. Company or Corporation)
     , Brisbane, CA (California), US (United States of America)
     [Assignee Code(s):
APPL. NO.: 8-511,289
FILED: August 04, 1995 (19950804)

  This is a continuation of application Ser. No. 07-885,262, field on May 18, 1992, now abandoned.

U.S. CLASS: 707-104 cross ref: 701-29; 701-30; 707-103
INTL CLASS: [6] G06F 17-30
FIELD OF SEARCH: 395-615; 395-614; 395-424.34; 395-424.35; 364-424.34;
     364-424.35

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PRIMARY EXAMINER: Lintz, Paul R.
ATTORNEY, AGENT, OR FIRM: Milks, III, William C.
CLAIMS: 20
EXEMPLARY CLAIM: 1
DRAWING PAGES: 113
DRAWING FIGURES: 114
ART UNIT: 237
FULL TEXT: 5234 lines

ABSTRACT

A computer based apparatus and method which provide access to complex technical information employed to maintain and %%%repair%%% complicated equipment, such as aircraft, to enable compliance with regulatory requirements.

1/2,AB/9   (Item 5 from file: 654)
DIALOG(R)File 654:US Pat.Full.
(c) format only 1998 The Dialog Corp. All rts. reserv.

        02811139
Utility
SYSTEM AND METHOD FOR CONTROLLING THE DISPENSING OF AN AUTHENTICATING INDICIA

PATENT NO.: 5,778,076
ISSUED: July 07, 1998 (19980707)
INVENTOR(s): Kara, Salim G., Houston, TX (Texas), US (United States of
        America)
        Gressett, David M., Houston, TX (Texas), US (United States of
        America)
        Whitney, Jonathan W., Houston, TX (Texas), US (United States
        of America)
ASSIGNEE(s): E-Stamp Corporation, (A U.S. Company or Corporation), Houston,

TX (Texas), US (United States of America)
[Assignee Code(s):
APPL. NO.: 8-516,010
FILED: August 16, 1995 (19950816)

REFERENCE TO RELATED APPLICATIONS

The present application is a continuation-in-part of U.S. application
Ser. No. 08-263,751, filed Jun. 22, 1994, now U.S. Pat. No. 5,606,507, and
entitled "System and Method for Storing, Retrieving and Automatically
Printing Postage on Mail," which in turn is a continuation-in-part of U.S.
application, Ser. No. 08-176,716, filed Jan. 3, 1994, now U.S. Pat. No.
5,510,992, and entitled "System and Method for Automatically Printing
Postage on Mail."

U.S. CLASS: 380-51 cross ref: 364-464.15; 364-464.18; 380-25
INTL CLASS: [6] G09C 3-08; H04K 1-00; G06F 17-00
FIELD OF SEARCH: 364-464.11; 364-464.2; 364-464.13; 364-464.14; 364-464.15;
        364-464.18; 380-4; 380-24; 380-25; 380-51

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4,641,347	2/1987	Clark et al.	
4,725,718	2/1988	Sansone et al.	
4,743,747	5/1988	Fougere et al.	235-494
4,757,537	7/1988	Edelmann et al.	380-51
4,763,271	8/1988	Field	364-466
4,775,246	10/1988	Edelmann et al.	380-23
4,800,506	1/1989	Axelrod et al.	
4,802,218	1/1989	Wright et al.	
4,812,994	3/1989	Taylor et al.	364-464.2
4,831,555	5/1989	Sansone et al.	
4,864,618	9/1989	Wright et al.	380-51
4,868,757	9/1989	Gil	
4,900,903	2/1990	Wright et al.	235-380
4,900,904	2/1990	Wright et al.	235-381
4,901,241	2/1990	Schneck	364-464.2
5,065,000	11/1991	Pusic	
5,111,030	5/1992	Brasington et al.	235-375
5,239,168	8/1993	Durst, Jr. et al.	
5,319,562	6/1994	Whitehouse	364-464.2
5,544,246	8/1996	Mandelbaum et al.	380-23

NON-U.S. PATENT DOCUMENTS

137737	4/1985	EP (European Patent Office)
2580844	10/1986	FR (France)
2251210	7/1992	GB (United Kingdom)
WO8801818	3/1988	WO (World Intellectual Property Org)

PRIMARY EXAMINER: Buczinski, Stephen C.
ATTORNEY, AGENT, OR FIRM: Fulbright & Jaworski L.L.P.
CLAIMS: 20
EXEMPLARY CLAIM: 1
DRAWING PAGES: 23
DRAWING FIGURES: 38
ART UNIT: 222
FULL TEXT: 1406 lines

ABSTRACT

There is disclosed a system and method for dispensing postage (or other graphical security indicia) electronically by using a portable processor containing a maximum amount of preauthorized postage which can be applied to any piece of mail. The portable processor can be refilled at various locations through the use of a closed-loop system which relies upon a database of users who are preregistered in the database. Each transaction, whether checking postage indicia for validity or refilling the portable processors, relies upon information pertaining to the registered user of the processor matching the information in the database. This system allows for the validation of a graphical security indicia at a location detached from the creator of the graphical indicia.

1/2,AB/10 (Item 6 from file: 654)
DIALOG(R)File 654:US Pat.Full.
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02783981
Utility
SYSTEM AND METHOD FOR DEVELOPING AND/OR MAINTAINING MULTIPLE WORKPLACE PROTECTION PROGRAMS

PATENT NO.: 5,752,054
ISSUED: May 12, 1998 (19980512)
INVENTOR(s): Garber, Sharon R., Crystal, MN (Minnesota), US (United States of America)
        Glaser, Rena H., St. Paul, MN (Minnesota), US (United States of America)
        Cary, Carolyn M., Woodbury, MN (Minnesota), US (United States of America)
ASSIGNEE(s): Minnesota Mining and Manufacturing Company, (A U.S. Company or Corporation), St. Paul, MN (Minnesota), US (United States of America)
        [Assignee Code(s): 55992]
APPL. NO.: 8-471,725
FILED: June 06, 1995 (19950606)
U.S. CLASS: 395-767 cross ref: 395-615; 395-768
INTL CLASS: [6] G06F 17-30
FIELD OF SEARCH: 395-155; 395-600; 364-300

References Cited

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PRIMARY EXAMINER: Black, Thomas G.
ASST. EXAMINER: Mizrahi, Diane D.
ATTORNEY, AGENT, OR FIRM: Marshall, O'Toole, Gerstein, Murray & Borun

CLAIMS: 71
EXEMPLARY CLAIM: 21
DRAWING PAGES: 80
DRAWING FIGURES: 81
ART UNIT: 237
FULL TEXT: 2424 lines

ABSTRACT

A program is disclosed which fully integrates the development and %%%maintenance%%% of multiple workplace protection programs. The program (i) provides the forms which are useful in developing and maintaining multiple workplace protection programs, (ii) facilitates the training of employees which is necessary to ensure that the multiple workplace protection programs are effective, (iii) includes the database which is necessary to provide all of the knowledge required during the development and %%%maintenance%%% of the multiple workplace protection programs, (iv) permits customization of the multiple workplace protection programs, (v) allows the employer and employees to read the knowledge provided by fully informative multiple workplace protection programs, (vi) assists the employer in preparing for an audit of the multiple workplace protection programs, and (vii) generates written standard operating procedures.

1/2,AB/11   (Item 7 from file: 654)
DIALOG(R)File 654:US Pat.Full.

        02704193
Utility
COMPUTER ASSISTED DRIVER VEHICLE INSPECTION REPORTING SYSTEM

PATENT NO.: 5,680,328
ISSUED: October 21, 1997 (19971021)
INVENTOR(s): Skorupski, Jeffrey H., Kalamazoo, MI (Michigan), US (United
        States of America)
        Lueckenbach, William H., Lewisville, NC (North Carolina), US
        (United States of America)
ASSIGNEE(s): Eaton Corporation, (A U.S. Company or Corporation), Cleveland,
        OH (Ohio), US (United States of America)
        [Assignee Code(s): 25848]
APPL. NO.: 8-445,832
FILED: May 22, 1995 (19950522)
U.S. CLASS: 364-550 cross ref: 364-551.01; 701-29; 701-30; 701-32; 701-35
INTL CLASS: [6] G06G 7-00
FIELD OF SEARCH: 364-550; 364-424.4; 364-424.34; 364-424.37; 364-424.35;
        364-423.98; 364-551.1; 340-430; 340-438; 340-426; 340-459

        References Cited

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4,728,922	3/1988	Christen et al.	340-991
4,763,356	8/1988	Day, Jr. et al.	379-368
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PRIMARY EXAMINER: Trammell, James P.
ASST. EXAMINER: Smith, Demetra R.
ATTORNEY, AGENT, OR FIRM: Uthoff, Jr., Loren H.
CLAIMS: 18
EXEMPLARY CLAIM: 1
DRAWING PAGES: 4
DRAWING FIGURES: 15
ART UNIT: 244
FULL TEXT: 369 lines

ABSTRACT

A computerized electronic system (10) for use in conjunction with a fleet of vehicles for complying with pre- and post-trip vehicle inspection reporting requirements while improving fleet %%%maintenance%%% and operations efficiency. An on-board computer (OBC) (12) having integrated or interfaced communications capability is used to receive and store data input by the driver and %%%maintenance%%% personnel. The OBC (12) may electronically store at least the current driver's inspection report and previous driver's inspection report to satisfy regulatory requirements. A copy of these reports can be produced on the vehicle in either electronic or paper form as required by an inspector. A ground support system (GSS) (16) may receive certain inspection information from an OBC (12) on a real time basis and thereby is provided ready access to pertinent vehicle data. The GSS provides necessary archival capabilities as well as use of the OBC data to automate routing and %%%maintenance%%% scheduling as well as to generate statistical information.

02688703
Utility
METHOD AND APPARATUS FOR RESOLVING FAULTS IN COMMUNICATIONS NETWORKS

PATENT NO.: 5,666,481
ISSUED: September 09, 1997 (19970909)
INVENTOR(s): Lewis, Lundy, Mason, NH (New Hampshire), US (United States of
      America)
ASSIGNEE(s): Cabletron Systems, Inc , (A U.S. Company or Corporation),
      Rochester, NH (New Hampshire), US (United States of America)
      [Assignee Code(s):
APPL. NO.: 8-23,972
FILED: February 26, 1993 (19930226)
U.S. CLASS: 395-182.02 cross ref: 371-20.1; 395-182.13
INTL CLASS: [6] G06F 11-00; G01R 31-28
FIELD OF SEARCH: 371-29.1; 371-20.1; 371-30; 395-575; 395-600; 395-182.2;
      395-182.13; 395-182.18; 395-183.1; 395-183.2; 395-650;
      364-284.4; 364-285.1

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al. "Fuzzy Technique in Network Management Expert System".

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ABSTRACT

An improved method and apparatus of resolving faults in a communications network. The preferred system uses a trouble ticket data structure to describe communications network faults. Completed trouble tickets are stored in a library and when an outstanding trouble ticket is received, the system uses at least one determinator to correlate the outstanding communications network fault to data fields in the set of data fields of the trouble ticket data structure to determine which completed trouble tickets in the library are relevant to the outstanding communications network fault. The system retrieves a set of completed trouble tickets from the library that are similar to the outstanding trouble ticket and uses at least a portion of the resolution from at least one completed trouble ticket to provide a resolution of the outstanding trouble ticket. The determinators may be macros, rules, a decision tree derived from an information theoretic induction algorithm and/or a neural network memory derived from a neural network learning algorithm. The system may adapt the resolution from a retrieved trouble ticket to provide the resolution using null adaptation, parameterized adaptation, abstraction/respecialization adaptation, or critic-based adaptation techniques.

1/2,AB/13   (Item 9 from file: 654)
DIALOG(R)File 654:US Pat.Full.
(c) format only 1998 The Dialog Corp. All rts. reserv.

    02625941
Utility
SYSTEM FOR MANAGING MULTIPLE DISPENSING UNITS AND METHOD OF OPERATION

PATENT NO.: 5,608,643
ISSUED: March 04, 1997 (19970304)
INVENTOR(s): Wichter, Martin A., Arlington, TX (Texas), US (United States
        of America)
        Pohrte, Tom R., The Colony, TX (Texas), US (United States of
        America)
        Ross, Jack A., The Colony, TX (Texas), US (United States of
        America)
        Sadler, Ray G., Plano, TX (Texas), US (United States of
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ASSIGNEE(s): General Programming Holdings, Inc, (A U.S. Company or
        Corporation), Dallas, TX (Texas), US (United States of
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        [Assignee Code(s):
APPL. NO.: 8-300,483
FILED: September 01, 1994 (19940901)
U.S. CLASS: 364-479.14 cross ref: 221-9; 364-479.11; 364-479.12
INTL CLASS: [6] G06F 17-00
FIELD OF SEARCH: 364-478; 364-479.1; 364-478.1.14; 194-217; 221-9;
        340-825.35

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PRIMARY EXAMINER: Envall, Jr., Roy N.
ASST. EXAMINER: Garland, Steven R.
ATTORNEY, AGENT, OR FIRM: Baker & Botts, L.L.P.
CLAIMS: 24
EXEMPLARY CLAIM: 1
DRAWING PAGES: 9
DRAWING FIGURES: 15
ART UNIT: 236
FULL TEXT: 1762 lines

ABSTRACT

A system (8) for managing multiple dispensing units by communicating information through a communications network (12) is provided. The system includes a plurality of dispensing units (10) operable to transmit and receive information through the network. Each dispensing unit includes a plurality of bins (20) operable to hold a quantity of product. Each dispensing unit includes a plurality of reference level sensors (72) where each reference level sensor is coupled to an associated bin. Each reference level sensor is operable to determine when the quantity of product in the associated bin drops below a reference level (76) that is higher than an out of stock level (82) of the associated bin. Each dispensing unit includes a controller subsystem (34) coupled to the plurality of bins, to the plurality of reference level sensors, and to the network. The controller subsystem is operable to monitor conditions of the dispensing unit, to transmit status messages responsive to an occurrence of one of a plurality of defined events, and to receive command messages. The system further includes a dispensing unit controller system (14) operable to communicate through the network. The dispensing unit controller system is operable to receive status messages from each of the dispensing units, to process the status messages, and to transmit command messages to each of the dispensing units. One command message can be an instruction to a dispensing unit to download a software module to update an existing software module in the controller subsystem of the dispensing unit.

1/2,AB/14   (Item 10 from file: 654)

02345222
Utility
LOTTERY EMULATION SYSTEM

PATENT NO.: 5,354,069
ISSUED: October 11, 1994 (19941011)
INVENTOR(s): Guttman, Uri, Arlington, MA (Massachusettes), US (United
       States of America)
       Nelson, Avi N., North Reading, MA (Massachusettes), US (United
       States of America)
       Piankian, Robert A., Brighton, MA (Massachusettes), US (United
       States of America)
       Scally, Joseph, Westwood, MA (Massachusettes), US (United
       States of America)
ASSIGNEE(s): Ahbrew Company, (A U.S. Company or Corporation), New York, NY
       (New York), US (United States of America)
       [Assignee Code(s):
APPL. NO.: 7-823,185
FILED: January 21, 1992 (19920121)
U.S. CLASS: 463-25 cross ref: 273-269; 364-412; 379-88; 379-93.13; 463-17;
       463-41
INTL CLASS: [5] A63F 9-22
FIELD OF SEARCH: 273-138R; 273-138A; 273-139; 273-269; 273-439; 364-410;
       364-412; 379-88; 379-89; 379-90; 379-91; 379-93; 379-95

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Patent No.	Date	Name	Class
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PRIMARY EXAMINER: Harrison, Jessica J.
ATTORNEY, AGENT, OR FIRM: Lahive & Cockfield
CLAIMS: 12

EXEMPLARY CLAIM: 1
DRAWING PAGES: 11
DRAWING FIGURES: 15
ART UNIT: 334
FULL TEXT: 1045 lines

ABSTRACT

A lottery by phone system which permits a caller to place bets with a
state's existing lottery computer system via a telephone call from a
touch-tone telephone which is connected via the public telephone network to
a voice response unit which decodes touch-tones entered by the caller. The
voice response unit prompts the caller with preprogrammed digitized audio
messages and has each caller identified via a unique identification number.
It permits such a caller to select which game to place a bet with and to
have the option of picking their own numbers or having the system randomly
pick numbers for them. It allows the caller to collect their winnings using
a touch tone telephone via another telephone call, and to have the
automatic interaction with the caller handle data entry errors, and to have
caller queries regarding previous such bets answered by an operator. The
system communicates with the existing state lottery computer via emulation
of the existing communications protocol used between the existing state
lottery computer and on-line terminals and performs automatic high level
error recovery beyond the specifications of that communications protocol.

1/2,AB/15   (Item 11 from file: 654)
DIALOG(R)File 654:US Pat.Full.

        02166415
Utility
INTEGRATED MULTI-VISUAL EXPERT SYSTEM %%%MAINTENANCE%%% ADVISOR

PATENT NO.: 5,195,173
ISSUED: March 16, 1993 (19930316)
INVENTOR(s): Gordon, Ira R., Farmingdale, US (United States of America)
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ASSIGNEE(s): AIL Systems, Inc , (A U.S. Company or Corporation), Deer
        Park, NY (New York), US (United States of America)
        [Assignee Code(s): 36869]
APPL. NO.: 7-833,623
FILED: February 07, 1992 (19920207)

  This is a continuation of copending application Ser. No. 07-458,776 filed
on Dec. 29, 1989 now abandoned.

U.S. CLASS: 395-60 cross ref: 395-902

INTL CLASS: [5] G06F 15-18
FIELD OF SEARCH: 395-607; 395-902

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PRIMARY EXAMINER: MacDonald, Allen R.
ASST. EXAMINER: Davis, George
ATTORNEY, AGENT, OR FIRM: Hoffman & Baron
CLAIMS: 4
EXEMPLARY CLAIM: 1
DRAWING PAGES: 5
DRAWING FIGURES: 5
ART UNIT: 238
FULL TEXT: 364 lines

ABSTRACT

An integrated multivisual expert system %%%maintenance%%% advisor system includes an expert system module, a photo-library module and a hypermanual module. The photo-library module and the hypermanual module are linked to each other and to the expert system module. The expert system module utilizes backward and forward chaining "if-then" program rule logic. The rule logic allows for computer program inference reasoning using %%%maintenance%%% technician entered failure systems. The photo-library module includes digitized photograph display processor programming in which magnetically stored digitized photographs are retrieved and processed. The hypermanual module allows instantaneous search and retrieveal of visual display screen of ASCII text character strings by either direct topic search keys or by related or indirect topic search keys, and provides %%%repair%%% and replacement information to the %%%maintenance%%% technician.

1/2,AB/16 (Item 12 from file: 654)
DIALOG(R)File 654:US Pat.Full.

02082488

Paul R. Lintz
September 23, 1998
47

Utility
GAS ASSISTED INJECTION MOLDING

PATENT NO.: 5,118,455
ISSUED: June 02, 1992 (19920602)
INVENTOR(s): Loren, Norman S., 24874 Chalk Farm Rd., Warren, MI (Michigan),
        US (United States of America), 48091 68000]
EXTRA INFO: Assignment transaction [Reassigned], recorded December 29,
        1994 (19941229)
APPL. NO.: 7-656,205
FILED: February 15, 1991 (19910215)
DISCLAIMER: August 13, 2008 (20080813)

RELATED APPLICATION

 This application is a continuation-in-part or U.S. Pat. application Ser.
No. 501147 filed Mar. 29, 1990, U.S. Pat. No. 5,039,463. .

U.S. CLASS: 264-40.3 cross ref: 264-40.6; 264-328.12; 264-328.13;
        264-328.16; 264-328.8; 264-572; 425-144; 425-149; 425-546;
        425-552; 425-562; 425-567; 425-568; 425-812
INTL CLASS: [5] B29C 45-76; B29C 45-78; B29D 22-00
FIELD OF SEARCH: 264-40.3; 264-40.6; 264-237; 264-328.8; 264-328.12;
        264-328.13; 264-328.16; 264-500; 264-572; 425-135; 425-143;
        425-144; 425-149; 425-546; 425-547; 425-552; 425-562; 425-567;
        425-568; 425-812

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250080	12/1987	EP (European Patent Office)
298635	1/1989	EP (European Patent Office)
309182	3/1989	EP (European Patent Office)
317176	5/1989	EP (European Patent Office)

PRIMARY EXAMINER: Tentoni, Leo B.
ATTORNEY, AGENT, OR FIRM: Krass & Young
CLAIMS: 76
EXEMPLARY CLAIM: 1
DRAWING PAGES: 5
DRAWING FIGURES: 20
ART UNIT: 137

FULL TEXT: 1157 lines

ABSTRACT

A method and apparatus for providing gas assistance in a resin injection
molding process of the type in which hot resin is injected into a mold, gas
is injected into the mold to displace a portion of the resin in the mold,
the resin cools, the gas is vented, and the mold is opened to remove the
molded part. The apparatus includes a high pressure gas storage system, a
plurality of pressure control assemblies set at varying pressures and
interposed between the high pressure gas storage system and the injection
nozzle, and a control system which is operative to selectively communicate
each of the pressure control assemblies with the injection nozzle so as to
allow the delivery of gas at varying pressures to the mold to facilitate
the creation of an individualized gas pressure profile to suit the
particular molding requirement. The apparatus further includes a
supplemental gas storage system including a plurality of gas storage
containers interposed between the pressure control assemblies and the
injection nozzle so that the supplemental gas storage system may be used in
selective cooperation with the pressure control assemblies to provide
further versatility with respect to the ability to tailor the pressure
profile to the particular molding requirement.

1/2,AB/17   (Item 13 from file: 654)
DIALOG(R)File 654:US Pat.Full.
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        01997401
Utility
GAS ASSISTED INJECTION MOLDING

PATENT NO.: 5,039,463
ISSUED: August 13, 1991 (19910813)
INVENTOR(s): Loren, Norman S., 24874 Chalk Farm Rd., Warren, MI (Michigan),
        US (United States of America), 48091 68000]
EXTRA INFO: Assignment transaction [Reassigned], recorded December 29,
        1994 (19941229)
APPL. NO.: 7-501,147
FILED: March 29, 1990 (19900329)
U.S. CLASS: 264-40.3 cross ref: 264-40.6; 264-328.12; 264-328.13;
        264-328.8; 264-572; 425-812
INTL CLASS: [5] B29C 45-00; B29C 45-76; B29C 45-78; B29D 22-00
FIELD OF SEARCH: 264-40.3; 264-40.6; 264-85; 264-328.8; 264-328.12;
        264-328.13; 264-500; 264-572; 425-812

        References Cited

        U.S. PATENT DOCUMENTS

4,101,617 7/1978 Friederick   264-572

4,740,150	4/1988	Sayer	425-542
4,781,554	11/1988	Hendry	425-4R
4,824,732	4/1989	Hendry et al.	428-542.8
4,855,094	8/1989	Hendry	264-40.3
4,935,191	6/1990	Baxi	264-572
4,943,407	7/1990	Hendry	264-572

NON-U.S. PATENT DOCUMENTS

250080	12/1987	EP (European Patent Office)
298635	1/1989	EP (European Patent Office)
309182	3/1989	EP (European Patent Office)
317176	5/1989	EP (European Patent Office)
852609	7/1949	DE (Germany)

PRIMARY EXAMINER: Tentoni, Leo B.
ATTORNEY, AGENT, OR FIRM: Krass & Young
CLAIMS: 29
EXEMPLARY CLAIM: 18
DRAWING PAGES: 4
DRAWING FIGURES: 7
ART UNIT: 137
FULL TEXT: 758 lines

ABSTRACT

A method and apparatus for gas assisted injection molding. The apparatus includes a bulk storage container; a booster receiving the gas from the bulk storage container and operating to boost the pressure to a relatively high level for delivery to a high pressure storage container; a regulator receiving the gas from the high pressure storage container and reducing the gas pressure to a desired injection pressure; and a control system for injecting the gas into the mold, at the injection pressure as determined by the regulator, thereafter reducing the gas pressure within the mold to a hold pressure, thereafter maintaining the gas in the mold at the hold pressure, and thereafter venting the mold to atmosphere. The apparatus allows the performance of two distinct injection molding methods. In the first method, the regulated gas is injected directly into the mold, is held at the injection pressure during the fill out portion of the molding cycle, and is thereafter reduced to a hold pressure. In the second method, the gas from the regulator is stored in a plurality of fixed volume storage containers and is thereafter injected into the mold from a selected storage container so that, as the gas moves into the expanded volume of the mold during the fill out portion of the molding cycle, the injection pressure is caused to drop to a reduced pressure at which it is held for the duration of the cooling cycle whereafter the mold is vented and the mold opened.
?t 1/2,ab,kwic/11,12,15

1/2,AB,KWIC/11   (Item 7 from file: 654)
DIALOG(R)File 654:US Pat.Full.

02704193
Utility
COMPUTER ASSISTED DRIVER VEHICLE INSPECTION REPORTING SYSTEM

PATENT NO.: 5,680,328
ISSUED: October 21, 1997 (19971021)
INVENTOR(s): Skorupski, Jeffrey H., Kalamazoo, MI (Michigan), US (United
        States of America)
        Lueckenbach, William H., Lewisville, NC (North Carolina), US
        (United States of America)
ASSIGNEE(s): Eaton Corporation, (A U.S. Company or Corporation), Cleveland,
        OH (Ohio), US (United States of America)
        [Assignee Code(s): 25848]
APPL. NO.: 8-445,832
FILED: May 22, 1995 (19950522)
U.S. CLASS: 364-550 cross ref: 364-551.01; 701-29; 701-30; 701-32; 701-35
INTL CLASS: [6] G06G 7-00
FIELD OF SEARCH: 364-550; 364-424.4; 364-424.34; 364-424.37; 364-424.35;
        364-423.98; 364-551.1; 340-430; 340-438; 340-426; 340-459

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Spectrum Oct. 1985, pp. 77-83 Oct. 1985.

PRIMARY EXAMINER: Trammell, James P.
ASST. EXAMINER: Smith, Demetra R.
ATTORNEY, AGENT, OR FIRM: Uthoff, Jr., Loren H.
CLAIMS: 18
EXEMPLARY CLAIM: 1
DRAWING PAGES: 4
DRAWING FIGURES: 15
ART UNIT: 244
FULL TEXT: 369 lines

ABSTRACT

A computerized electronic system (10) for use in conjunction with a fleet
of vehicles for complying with pre- and post-trip vehicle inspection
reporting requirements while improving fleet %%%maintenance%%% and
operations efficiency. An on-board computer (OBC) (12) having integrated or
interfaced communications capability is used to receive and store data
input by the driver and %%%maintenance%%% personnel. The OBC (12) may
electronically store at least the current driver's inspection report and
previous driver's inspection report to satisfy regulatory requirements. A
copy of these reports can be produced on the vehicle in either electronic
or paper form as required by an inspector. A ground support system (GSS)
(16) may receive certain inspection information from an OBC (12) on a real
time basis and thereby is provided ready access to pertinent vehicle data.
The GSS provides necessary archival capabilities as well as use of the OBC
data to automate routing and %%%maintenance%%% scheduling as well as to
generate statistical information.

ABSTRACT

... vehicles for complying with pre- and post-trip vehicle inspection
reporting requirements while improving fleet %%%maintenance%%% and
operations efficiency. An on-board computer (OBC) (12) having integrated or
interfaced communications capability is used to receive and store data
input by the driver and %%%maintenance%%% personnel. The OBC (12) may
electronically store at least the current driver's inspection report...

... necessary archival capabilities as well as use of the OBC data to
automate routing and %%%maintenance%%% scheduling as well as to generate
statistical information.
... used by commercial vehicle drivers and mechanics to record and report
mandatory vehicle inspection and %%%repair%%% information.
  Federal law currently requires that commercial trucking operations comply
with certain record keeping procedures that include the creation of
pre-trip and post-trip vehicle inspection reports and the %%%maintenance%%%
of vehicle service information. For instance, a driver must inspect a
vehicle at the beginning...

... time period thereafter a signed report of his findings must be
producible upon demand. Similarly, %%%repair%%% and service information
must also be kept and be produced upon demand. Current methods of complying
with these procedures generally involve the %%%maintenance%%% of a coupon
book in which the necessary %%%forms%%% are bound together, %%%filled%%%
%%%out%%% as necessary by the driver and %%%repair%%% personnel, and kept
on board the vehicle and in the %%%maintenance%%% shop or trucking office
for predetermined periods of time.

  However, use of this manual coupon book system is often burdensome and
time consuming. The multi-copy %%%forms%%% must be %%%filled%%% %%%out%%%
and retained and may be susceptible to damage and loss. The %%%forms%%%
must be ...as possible in order to determine the availability of vehicles
for pickup and delivery scheduling, %%%maintenance%%% scheduling and other

similar tasks. Storing this data in electronic %%%form%%% further enables statistical calculations and record keeping which is cumbersome with manually %%%filled%%% %%%out%%% paper %%%forms%%%.

SUMMARY OF THE INVENTION

The present invention addresses this need by providing a computerized electronic system for complying with federal inspection reporting requirements as well as for streamlining fleet %%%maintenance%%% operations. An interactive on-board computer (OBC) having integrated or interconnected mobile data communications capability is used to receive data input by the driver and appropriate %%%maintenance%%% personnel, as well as that from various sensors which may also be placed in the... information obtained directly without a separate inputting process significantly reduces this record keeping burden. Defect %%%repair%%% and reporting procedures will be similarly further streamlined. This trip inspection reporting information can also...

... a point most convenient for potential users, both the driver and other personnel such as %%%maintenance%%% and service persons. The OBC may be completely portable but retained in a cradle or...were repaired, the report must further include the I.D. of the mechanic performing the %%%repair%%%, also typically a signature, and accompanying date. If service work was performed to fix any reported problems, the present vehicle driver's verification of an acceptable %%%repair%%% including the driver's ...is also preferably entered into a database for use in simplifying additional tasks such as %%%maintenance%%% scheduling, generating work orders, inventory and statistical record keeping.

Once a mechanic has remedied the... transmission (such as to GSS 16) options, interfaces to other related systems such as a %%%maintenance%%% management system and numerous report printing options. In addition, system 10 can be programmed to...

1/2,AB,KWIC/12   (Item 8 from file: 654)
DIALOG(R)File 654:US Pat.Full.
(c) format only 1998 The Dialog Corp. All rts. reserv.

         02688703
Utility
METHOD AND APPARATUS FOR RESOLVING FAULTS IN COMMUNICATIONS NETWORKS

PATENT NO.: 5,666,481
ISSUED: September 09, 1997 (19970909)
INVENTOR(s): Lewis, Lundy, Mason, NH (New Hampshire), US (United States of
         America)
ASSIGNEE(s): Cabletron Systems, Inc , (A U.S. Company or Corporation),
         Rochester, NH (New Hampshire), US (United States of America)
         [Assignee Code(s):
APPL. NO.: 8-23,972
FILED: February 26, 1993 (19930226)
U.S. CLASS: 395-182.02 cross ref: 371-20.1; 395-182.13

INTL CLASS: [6] G06F 11-00; G01R 31-28
FIELD OF SEARCH: 371-29.1; 371-20.1; 371-30; 395-575; 395-600; 395-182.2;
    395-182.13; 395-182.18; 395-183.1; 395-183.2; 395-650;
    364-284.4; 364-285.1

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442 809	8/1991	EP (European Patent Office)	
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ABSTRACT

An improved method and apparatus of resolving faults in a communications network. The preferred system uses a trouble ticket data structure to describe communications network faults. Completed trouble tickets are stored in a library and when an outstanding trouble ticket is received, the system uses at least one determinator to correlate the outstanding communications network fault to data fields in the set of data fields of the trouble ticket data structure to determine which completed trouble tickets in the library are relevant to the outstanding communications network fault. The system retrieves a set of completed trouble tickets from the library that are similar to the outstanding trouble ticket and uses at least a portion of the resolution from at least one completed trouble ticket to provide a resolution of the outstanding trouble ticket. The determinators may be macros, rules, a decision tree derived from an

information theoretic induction algorithm and/or a neural network memory derived from a neural network learning algorithm. The system may adapt the resolution from a retrieved trouble ticket to provide the resolution using null adaptation, parameterized adaptation, abstraction/respecialization adaptation, or critic-based adaptation techniques.

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... is provided by the same vendor and the network configuration does not change), management and %%%repair%%% of network faults is relatively straightforward. However, as a communications network becomes increasingly large and... system provides a number of tools that can be used by network users, administrators, and %%%repair%%% and %%%maintenance%%% personnel. The basic data structure, a "trouble ticket," has a number of fields in which...

... by a user may then be transmitted by, for example, an electronic mail system to %%%maintenance%%% and %%%repair%%% personnel. A trouble ticket describing a current network fault that needs to be acted on...

... a memory and thus a library of such tickets is created, allowing users, administrators, and %%%maintenance%%% and %%%repair%%% personnel to refer to these stored completed trouble tickets for assistance in determining solutions to... by the fault detection system to be transmitted to the trouble-ticketing system in the %%%form%%% of an automatically-generated and %%%filled%%% %%%out%%% trouble ticket. The trouble-ticketing system then manages communication and workflow among the network administrator system and appropriate %%%maintenance%%% and %%%repair%%% personnel more quickly, it does not reduce the time necessary to resolve an outstanding fault. A %%%maintenance%%% and %%%repair%%% person is still required to research and resolve the outstanding fault. This is not only...which the RBR system operates remains relatively stable, once a correct system is achieved, minimal %%%maintenance%%% is required. However, if the system is used to resolve faults in unpredictable or rapidly...
... server, a client workstation attached to the network, or a workstation dedicated to use by %%%maintenance%%% and %%%repair%%% personnel for network fault resolution.

FIG. 2 is a block diagram of various modules included...for various system users. A notification module 54 provides automatic notification to a

pre-selected %%%maintenance%%% and %%%repair%%% person upon receipt of a trouble ticket. A user module 56 allows a user to...

... ticket and allows entry or modification of certain data in the trouble ticket such as %%%repair%%% status by authorized personnel. A communications link 58 connects the various modules together.

FIG. 3...

... or network monitoring system 12 automatically to fill out the trouble ticket so that a %%%maintenance%%% and %%%repair%%% person may obtain the information necessary to resolve the problem. As noted, trouble ticket 60 ... entered into trouble field 62L and any additional data that may be helpful to the %%%maintenance%%% and %%%repair%%% personnel is entered in data field 62M. Field 62M may be subdivided into separate fields... displaying them on display monitor 46 or printing them on printer 48 to allow the %%%maintenance%%% and %%%repair%%% person to inspect, execute, and/or manually adapt the proposed solutions, if desired. The system... network memory data structure 117. Macros may be determined by recording the actions of the %%%repair%%% and %%%maintenance%%% personnel during the sorting and selection of relevant trouble tickets and then defining the process...example, considering the first retrieved trouble ticket described in connection with FIG. 6 above, a %%%maintenance%%% and %%%repair%%% person could include the data field "network sub -- load" and refine the solution by providing...

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DIALOG(R)File 654:US Pat.Full.
(c) format only 1998 The Dialog Corp. All rts. reserv.

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Utility
INTEGRATED MULTI-VISUAL EXPERT SYSTEM %%%MAINTENANCE%%% ADVISOR

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FULL TEXT: 364 lines

ABSTRACT

An integrated multivisual expert system %%%maintenance%%% advisor system includes an expert system module, a photo-library module and a hypermanual module. The photo-library module and the hypermanual module are linked to each other and to the expert system module. The expert system module utilizes backward and forward chaining "if-then" program rule logic. The rule logic allows for computer program inference reasoning using %%%maintenance%%% technician entered failure systems. The photo-library module includes digitized photograph display processor programming in which magnetically stored digitized photographs are retrieved and processed. The hypermanual module allows instantaneous search and retrieveal of visual display screen of ASCII text character strings by either direct topic search keys or by related or indirect topic search keys, and provides %%%repair%%% and replacement information to the %%%maintenance%%% technician.

INTEGRATED MULTI-VISUAL EXPERT SYSTEM %%%MAINTENANCE%%% ADVISOR

ABSTRACT

An integrated multivisual expert system %%%maintenance%%% advisor system includes an expert system module, a photo-library module and a hypermanual

module...

... if-then" program rule logic. The rule logic allows for computer program inference reasoning using %%%maintenance%%% technician entered failure systems. The photo-library module includes digitized photograph display processor programming in...

... either direct topic search keys or by related or indirect topic search keys, and provides %%%repair%%% and replacement information to the %%%maintenance%%% technician.
...flow chart illustrating the operation of the system in analyzing a fault condition and providing %%%repair%%% information regarding the same.

FIG. 5 is a chart comparing the time spent during a...
... to a data processing computer system for improving the way diagnostic predictions and subsequent corrective %%%maintenance%%% repairs are calculated and processed by workers involved in %%%maintenance%%% activities for systems that are mechanical, electrical, electronic, or fluid driven.

2. Description of the...

... e., the answer) to a problem, such as an electrical, or mechanical failure, and associated %%%repair%%% action. The answer or conclusion typically is a string of ASCII text displayed on a...

... removal, replacement or reinstallation procedures of the components which are diagnosed as having failed. The %%%maintenance%%% technician (MT), under the current system design, is forced to use volumes of written manuals...

... problems in locating potentially misplaced, outdated, or lost written manuals, thus creating bottle necks in %%%maintenance%%% %%%repair%%% activities.

Prior to the development of automated diagnostic systems, the %%%maintenance%%% technician historically referred to one or two types of manuals or both in isolating and...

... second manual referred to is a fault isolation manual. This manual defined the action the %%%maintenance%%% technician would follow to effect changes in the equipment, for example, replacement of the failed...

... automated "thinking" process which calculates and evaluates fault paths rapidly and provides guidance to the %%%maintenance%%% technician. The expert system uses a computer and a visual display screen. The computer program...

... is another object of the present invention to provide an integrated multi-visual expert system %%%maintenance%%% system employing an expert system, and a digitized photo-library and hypermanual module which are...

... expert system to provide on a visual display screen troubleshooting instructions as well as component %%%repair%%% or replacement information.

It is a further object of the present invention to provide a fully integrated multivisual expert system for diagnostic predictions and corrective %%%maintenance%%% repairs which overcomes the disadvantages of conventional diagnostic systems.

It is yet a further object...

... present invention to provide a fully integrated multi-visual expert system for direct use in %%%maintenance%%% technician computer aided training.

In accordance with one form of the present invention, an integrated multi-visual expert system %%%maintenance%%% advisor system includes an artificial intelligence based expert system module, a digitized photographic display (i...

... of the system has failed. The computer program associated with the expert system asks the %%%maintenance%%% technician a series of questions, preferably in a multiple choice selection process, and provides the %%%maintenance%%% technician with answers or conclusions.

The photo-library module is a digitized photograph display processor...

... i.e., the expert system and the photo-library), and automatically searches and retrieves appropriate %%%repair%%%, replacement or corrective action text and displays this information on a visual display screen.

Through...

... library module, and hypermanual module, pre-programmed training lessons can be complemented and accessed by %%%maintenance%%% personnel. Operator selected %%%maintenance%%% training on a multitude of subjects would be magnetically stored, providing instaneous access. Selection of...

... feature of the present invention would appear in more rapid on-the-job training of %%%maintenance%%% personnel and in a minimization of the effect of personnel turnover.

The preferred form of the integrated multi-visual expert system %%%maintenance%%% advisor system, as well as other embodiments, features and advantages of this invention will be...
...PREFERRED EMBODIMENTS

Referring initially to FIG. 1 of the drawings, an integrated multivisual expert system %%%maintenance%%% advisor system, constructed in accordance with the present invention, basically includes a computer 2 containing...

... will be explained in greater detail, the visual display screen 8 will display to the %%%maintenance%%% technician and other %%%maintenance%%%

personnel various types of diagnostic information. This diagnostic information includes test procedures, i.e., questions posed to the %%%maintenance%%% technician for the diagnostic system to determine which component has failed, analysis information, that is, conclusions and answers based on the questions posed, digitized photographs and other %%%repair%%% information, such as schematics, on screen forms for work reports and ordering parts, and other information.

As shown in FIG. 2 of the drawings, the integrated multivisual expert system %%%maintenance%%% advisor system of the present invention basically includes a triad of computer modules or elements...

... if-then", program rule logic. The rule logic allows for computer programmed inference reasoning using %%%maintenance%%% technician entered failure symptoms such that evaluation and data processing will lead to a calculated diagnostic conclusion and corrective %%%repair%%% activity.

As more specifically illustrated by FIG. 3, the expert system module 14 includes a %%%maintenance%%% technician interface section 16, so that the diagnostic system of the present invention can interface...

... intelligence programming of the expert system module. The inference programming section 18 cooperates with the %%%maintenance%%% technician interface section 16 and performs the analysis based on information provided to the expert system module by the %%%maintenance%%% technician.

The expert system module 14 further includes a knowledge base section. The knowledge base...

... base section 22 The rule base section 20 presents a set of questions to the %%%maintenance%%% technician, which questions may be in a multiple choice format. The information base section 22 receives data either from the %%%maintenance%%% technician or directly from the equipment being tested through the interface module 12, and provides...

...base section 20.

Returning to FIG. 2 of the drawings, the integrated multivisual expert system %%%maintenance%%% advisor system of the present invention further includes a second core software element or module...which may be displayed on the visual display screen 8.

The integrated multivisual expert system %%%maintenance%%% advisor system of the present invention further includes a third core element referred to as...

... data to the hypermanual module 26, whereupon an automatic search and retrieval of the appropriate %%%repair%%%, replacement or corrective action text is performed by the hypermanual module 26. The %%%maintenance%%% trainer, through a selection menu screen appearing on the visual display screen 8, may select...

... on the visual display screen. The menu lists a number of major failures which the %%%maintenance%%% technician may wish to diagnose. In the second step, therefore, the %%%maintenance%%% technician selects a symptom of failure displayed on the menu by using the keyboard 4...

... step in the operation of the diagnostic system is where the expert system asks the %%%maintenance%%% technician a series of diagnostic questions. These questions may be in a multiple choice format which simplifies the analysis process for the %%%maintenance%%% technician, as well as speeding up the process. The %%%maintenance%%% technician answers via the keyboard 4 the questions posed by the expert system and displayed
...

...visual display screen 8 (Block 32).

The fifth step of the operation is where the %%%maintenance%%% technician, provided with the calculated conclusion to the problem, can make one of several selections...

... in step 2 the menu of various failures which may have occurred, so that the %%%maintenance%%% technician may select another symptom of failure (Block 36). The operation then proceeds in the manner described previously.

Second, the %%%maintenance%%% technician may wish to select photograph processing, i.e., the graphic category (Block 38). He...

... 8 (Block 40). The operation will then return to step 5 (Block 42) where the %%%maintenance%%% technician may select the same or a different category.
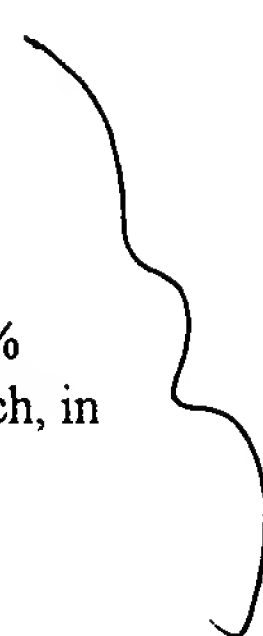
Third, the %%%maintenance%%% technician may select hypermanual processing, i.e., the text category (Block 44). Instructions on how to make the %%%repair%%%, order forms and part information will be displayed on the visual display screen by the...

...module 24 (Block 46). The operational program will then return to step 5 where the %%%maintenance%%% technician may select a different category (Block 48).

FIG. 5 illustrates the projected time savings...

...application using the present invention. The time incurred in each stage of manual troubleshooting and %%%repair%%% is shown in the left hand column and compared with that using the present invention...

... is detected in the equipment, the first step 50 is basically to prepare the necessary %%%maintenance%%% forms and record ...the forms is estimated to take 2% of the time incurred in a troubleshooting and %%%repair%%% operation. However, the integrated diagnostic system of the present invention is adapted to help the %%%maintenance%%% technician %%%fill%%% %%%out%%% the necessary %%%forms%%% and complete the paperwork which, in the particular application illustrated by FIG. 5, reduced the...

...and tools to do the troubleshooting. This has been estimated to take 10% of the %%%maintenance%%% cycle in a manual operation. However, with the present invention, the diagnostic system will advise the %%%maintenance%%% technician what data and tools are necessary to make the repairs, resulting in a reduction in the time for this step to 5% of the %%%maintenance%%% cycle.

The next step 54 is the actual troubleshooting and fault isolation step. Manually, this has been estimated to occupy 35% of the time of a %%%maintenance%%% cycle. In this step, the %%%maintenance%%% technician must identify what is wrong with the equipment, and he conventionally used manuals to...

... system of the present invention, however, has reduced the time of this portion of the %%%maintenance%%% cycle to about 20%, as it guides the %%%maintenance%%% technician through troubleshooting and fault isolation.

The next step 55 in the %%%maintenance%%% cycle is to do an illustrated parts breakdown analysis and to obtain the replacement parts...
... replacement part. The time estimated for completing this step manually is 3% of the total %%%maintenance%%% cycle time.

The system of the present invention is capable of illustrating the parts and...

...allotted for this step has been reduced to 1%.

The next step 56 in the %%%maintenance%%% process is to remove and replace the failed components. Manually, the time this step takes is about 25% of the total %%%maintenance%%% cycle. This time is the same for troubleshooting using the diagnostic system of the present invention as it is for manual troubleshooting.

The next step 58 in a %%%maintenance%%% procedure is a final test and checkout. Manually, the %%%maintenance%%% technician must know the test procedure, and he obtains this information by looking it up...

... has been estimated that this step takes 15% of the time required in a manual %%%maintenance%%% operation.

The present invention provides an on-line test procedure, and it has been estimated that the time required for final test and checkout is reduced to 10% of the %%%maintenance%%% cycle.

In many applications, after the final test and checkout has occurred, there is a...

...that the time for this step takes about 10% of the total time in the %%%maintenance%%% operation either manually or using the diagnostic system of the present invention.

Accordingly, it is...

...save 28%, and as much as 40%, in the time required to complete a normal %%%maintenance%%% operation.

The expert system program and hypermanual program may be derived using the program, VP...

... the present invention and operates in conjunction with an IBM PC personal computer as a %%%maintenance%%% advisory system for an oil cooling cart for an aircraft. It is envisioned that other the integrated multivisual expert system %%%maintenance%%% advisor system of the present invention quickly and accurately isolates a fault in equipment being tested and provides guidance to the %%%maintenance%%% technician in removing or · replacing the faulty components. The system of the present invention eliminates the need to refer to manuals in conducting the troubleshooting or %%%repair%%%, and reduces the overall time estimated to be needed in a %%%maintenance%%% operation.

Although illustrative embodiments of the present invention have been described herein with reference to...
What is claimed is:

1. An integrated multivisual expert system %%%maintenance%%% advisor system, which comprises:
an expert system module;
a photo-library module operatively linked to...

...computer, the computer memory portion of which the hypermanual module is formed having stored therein %%%repair%%% and replacement information.

2. An integrated multivisual expert system %%%maintenance%%% advisor system as defined by claim 1, wherein the expert system module utilizes backward and forward chaining "if-then" program rule logic.

3. An integrated multivisual expert system %%%maintenance%%% advisor system as defined by claim 1, wherein the expert system includes a %%%maintenance%%% technician interface portion, an inference engine portion operatively linked to the %%%maintenance%%% technician interface portion, a rule base portion operatively linked to the inference engine portion, and
...

...base portion operatively linked to the rule base portion.

4. An integrated multivisual expert system %%%maintenance%%% advisor system as defined by claim 1, wherein the computer memory portion of which the...
? logoff hold
23sep98 13:08:16 User219455 Session D517.7
$3.68 0.668 DialUnits File652
$3.00 1 Type(s) in Format 9 (UDF)
$3.00 1 Types
$6.68 Estimated cost File652
$5.27 0.959 DialUnits File653

$9.00 3 Type(s) in Format 9 (UDF)
$9.00 3 Types
$14.27 Estimated cost File653
$10.43   1.897 DialUnits File654
$48.00 16 Type(s) in Format 9 (UDF)
$48.00 16 Types
$58.43 Estimated cost File654
OneSearch, 3 files, 3.524 DialUnits FileOS
$2.20 TYMNET
$81.58 Estimated cost this search
$124.99 Estimated total session cost 13.429 DialUnits
Logoff: level 98.08.31 D 13:08:16

TYMNET: call cleared by request
+++
OK
ATHZ
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